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KAPITEL 8 / CHAPTER 8⁸

MODERN ASPECTS OF THERAPEUTIC FASTING FND FEEDING

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Introduction

The history of the use of hunger as a remedy is as old as the world. At all times, in all world religions, the practice of fasting has been used for therapeutic and prophylactic purposes and as a sacred rite. This method is believed to help not only spiritual well-being, but also physical healing [1,2,5,10,11,16].

Since ancient times, Christians have fasted in order to get closer to God and cleanse the body. Fasting is the main part of Great Lent, when Christians exclude meat and dairy dishes, as well as eggs, from their diet.

Fasting has always been one of the obligatory religious norms in Judaism, when Jews refuse food and water for a day. For Muslims, one of the five pillars of Islam is daily dry fasting during the month of Ramadan [11,14,16].

Fasting is also included in the complex of spiritual rituals of Buddhists, who fast during the full moon or on Buddhist holidays, refusing any food, but drinking water or infusions.

At all times, regardless of nationality, territory of residence and religion, we come across references to therapeutic fasting. This is not surprising, because this method of treatment is one of the most accessible and effective for any person. But therapeutic fasting becomes especially relevant in the 21st century, when, with a sedentary lifestyle, the level of calorie consumption increases: over the past 50 years it has increased 1.5 times! It has been proven that 3 million people die every year from diseases caused by overeating and an abundance of junk food [4,10,12,16,18].

It is known that the ancient Greek philosopher and mathematician Pythagoras, the ancient biographer Plutarch, and the famous philosopher Plato considered fasting the most effective way to improve mental and creative abilities, as well as health.

Since the 17th century, the English doctor Chaîne and the German doctor

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Friedrich Hoffmann practiced treating various diseases using fasting.

Fasting became most widespread in the 20th century, when medical centers practicing fasting treatment were opened in Germany, France, the USA and Switzerland.

A breakthrough in the study of the effects of hunger on the human body was the awarding of the Nobel Prize in Medicine and Physiology in 2016 to the Japanese scientist Yoshinori Ohsumi, a cell biologist who discovered the process of autophagy - a natural, regulated mechanism of the cell that disassembles unnecessary or dysfunctional components. According to the discovery of a Japanese scientist, fasting and fasting are beneficial for the body, which is cleansed and healed through autophagy. During fasting-diet therapy (FDT), the mechanisms of natural selection are activated. To maintain healthy cells, the body uses diseased molecules and cells, while repair processes are activated at the molecular, cellular and tissue level [1,2,5,8,10,16,18].

8.1. Fasting-diet therapy

8.1.1. Indications for the therapeutic fasting

What do we understand by the term therapeutic fasting?

This is a voluntary partial or complete refusal of food, and sometimes water, during dry fasting. During fasting, you should not consume absolutely anything from food, with the exception of liquid if it is a water fast. Drinking juices is not fasting.

Dosed therapeutic fasting, or FDT, is a method of dietary treatment for both adults and children. Fasting is a physiological process that is based on a person's ability to endure relatively long periods of lack of food. There is virtually no literature data on performing FDT in children, although the method is used in the practice of treating children over 12 years of age and adolescents [1,2,3,8,16,18].

Indications for the use of therapeutic fasting are:

✓ hypertension stages I and II;



- ✓ neurocirculatory dystonia of hypertensive and mixed type (but not of the hypotonic type - due to the likelihood of orthostatic collapse);
- ✓ coronary heart disease, angina pectoris I, II and III functional class;
- ✓ chronic obstructive bronchitis;
- ✓ bronchial asthma;
- ✓ pulmonary sarcoidosis stages I and II;
- ✓ chronic gastritis with insufficiency of gastric secretory function and hyperchlorhydria, gastroduodenitis;
- ✓ chronic acalculous cholecystitis, pancreatitis;
- ✓ biliary dyskinesia; irritable bowel syndrome;
- ✓ diseases of the musculoskeletal system, dystrophic and inflammatory genesis;
- ✓ neuroendocrine disorders in chronic salpingo-oophoritis;
- ✓ prostate adenoma;
- ✓ nutritional constitutional diencephalic obesity;
- ✓ resistance to drug therapy;
- ✓ skin allergy (chronic allergic dermatosis, neurodermatitis, psoriasis, eczema);
- ✓ neuroses, depression, low-grade schizophrenia, food and/or drug allergies.

8.1.2. Contraindications to the therapeutic fasting

Contraindications to the therapeutic fasting can be absolute and relative:

Absolute contraindications include:

- ✓ pronounced deficiency of body weight (more than 15% of the required values);
- ✓ malignant tumors;
- ✓ active tuberculosis of the lungs or other organs;
- ✓ bronchiectasis;
- ✓ systemic blood diseases;
- ✓ diabetes mellitus type I;



- ✓ thyrotoxicosis;
- ✓ disturbance of heart rhythm and/or conduction of any origin;
- ✓ condition after a large-focal myocardial infarction;
- ✓ heart failure stage II B – III;
- ✓ chronic hepatitis, liver cirrhosis;
- ✓ chronic renal and liver failure of any origin;
- ✓ thrombophlebitis;

Relative contraindications are:

- ✓ coronary heart disease with rhythm disturbances and cardiac failure above stage II A;
- ✓ severe hypotension;
- ✓ cholelithiasis;
- ✓ urolithiasis;
- ✓ peptic ulcer of the stomach and duodenum;
- ✓ chronic venous insufficiency;
- ✓ diabetes mellitus type II;
- ✓ gout;
- ✓ feverish conditions;
- ✓ pregnancy and lactation;
- ✓ childhood and old age of patients.

Experience with the use of FDT allows us to expand and change these indications and contraindications [3,8,11].

In pediatric practice, fasting is used for medicinal purposes for diseases of the digestive canal, kidneys, lungs, and skin.

In connection with the characteristics of the child's body at different age periods, approximate periods of fasting have been developed:

- ✓ children under one year of age – no more than 1 day;



✓ 2 years – no more than 2 days;

✓ up to 12 years – the maximum duration of fasting should not exceed the number of years of the child;

✓ between the ages of 13 and 18 years, you can fast for up to 20 days, taking into account individual characteristics, mental state, and general well-being.

Fasting in children is associated with a number of difficulties: less discipline in the child, difficulty in explaining the purpose of fasting, and lack of independent thinking.

Children often find it difficult to resist the temptation to break the routine. Therefore, many experts recommend setting the timing of fasting for children, taking into account not only the age, but also the individual characteristics of the child.

Most FDT specialists believe that it is most advisable to carry out fasting days for 24 hours, which should be carried out once a week. The effect of such fasting is achieved more slowly, but this method is gentler and should be preferred if there is doubt about the child's ability to endure hunger. The method of cascade fasting, short in duration, but with proper restorative nutrition, has proven itself well.

8.1.3. Effects of therapeutic fasting

The physiological effect of therapeutic fasting is due to the hemodynamic, detoxification and autolytic effects [3,8,11].

Let's look at each of them in more detail.

Hemodynamic effect. From the very first days of therapeutic fasting and FDT, a gradually progressive decrease in body weight is noted.

Within 7 days of abstaining from food, body weight decreases by an average of 8%, mainly due to the disappearance of fat deposits, within such limits this is considered quite acceptable. Along with a decrease in body weight, tension in the systemic circulation decreases, which helps improve blood flow in all organs and tissues.

In addition, with a multi-day refusal of food (a significant reduction in the amount of food during FDT), the motor-secretory function of the stomach and intestines, as



well as the liver, significantly decreases. At the same time, they do not need increased blood flow, which usually reaches 25% of the total blood flow. The intensity of blood circulation in the abdominal organs during therapeutic fasting decreases by 15–20%, as a result of which peripheral resistance decreases, blood pressure and pulse decrease, and heart function becomes easier.

During the process of dosed therapeutic fasting, a kind of redistribution of blood occurs. It flows from the empty stomach and intestines and is sent in sufficient quantities to other parts of the body, primarily to hypoxic and ischemic foci. Improving general circulation helps to open spasmodic and non-functioning capillaries.

Thus, both during therapeutic fasting and FDT, favorable conditions are created for blood supply to those tissues and organs in which it is usually insufficient (due to overeating, digestive overload). The hemodynamic effect of therapeutic fasting is to improve cerebral circulation, blood circulation in the endocrine glands, skin and other organs. Objectively, this is manifested by increased mental activity, sharpened memory, cessation of angina attacks, increased sexual function, and skin rejuvenation.

Detoxification effect. Every year the environment becomes more and more toxic. Children are the ones who suffer the most from this. The reason for this is toxic metabolic products deposited in the blood vessels, muscles, joints, and other organs and tissues of the body of the expectant mother and child. Of all the cleansing agents available to medicine, fasting and, to a lesser extent, FDT have a significant detoxifying effect. Cleansing the body of toxins and waste occurs both from external reservoirs (intestines, bladder) and internal environments (cells and intercellular substance).

During therapeutic fasting, a huge amount of energy is released, which is entirely spent on cleansing the body. Thanks to this, all excretory systems begin to function intensively. The improvement of their activity is facilitated by the effective functioning of the cardiovascular system. Enemas, showers and other aids to excretion are of some importance. The body, under conditions of food rest, engages in intensive detoxification activities. This releases a large amount of toxins accumulated over a number of years. This process is very complex and energetically active, since the release of toxins and under-oxidized metabolic products places increased demands on



all disinfecting systems of the body, primarily on the liver and kidneys. In weakened patients with severe, debilitating diseases, the forced release of toxins is fraught with complete blockade of vital organs and, as a result, irreversible changes in the body. Observations of the death of patients during prolonged fasting are described.

Does this indicate the danger of therapeutic fasting?

Yes, but only if the duration of doctor-controlled fasting exceeds 30 days. With uncontrolled fasting - self-medication, any, even short-term (within 2-3 days) refusal of food can lead to tragic consequences.

Autolytic effect. During therapeutic fasting (or a significant reduction in the amount of food during FDT), the human body switches to so-called endogenous (internal) nutrition. Initially, when glycogen reserves are not used up, fats are completely burned in the fire of carbohydrates. Subsequently, the body begins to produce glucose from its own fat and protein. Simultaneously with fats, proteins are utilized, which are replenished from the reserves available in the tissues of organs that are less important for the body.

Eating one's own proteins is a kind of "autocannibalism" - a condition in which a starving person eats his own tissue. At first glance, such nutrition may seem ridiculous and negative. However, this is only at first glance.

Physiologists have uncovered one of the interesting secrets of therapeutic fasting. It turned out that when using protein reserves, pathologically altered tissues and all adhesions, deposits, edema and tumors present in the body are primarily utilized. A process of self-purification and self-renewal occurs, called autolysis. Therefore, therapeutic fasting is sometimes compared to an operation without a knife, in which nature treats unaffected areas with care and decisively eliminates all affected areas. Being on endogenous nutrition during FDT, the body is freed from materials of lower quality in all possible ways. When cleansing the body of internal toxic substances, an unpleasant taste in the mouth, bad breath, foul-smelling urine and excrement occur.

The destruction of affected cells is due to the release of lymphoepithelial cells throughout the digestive canal. With a multi-day refusal of food, conditions are created for the withdrawal of a very powerful army of B-lymphocytes from the advanced



gastrointestinal positions. They are drawn from all lymphatic collectors and nodes of the digestive canal, especially from the small intestine. B lymphocytes suppress and neutralize all pathological and foreign elements (inflammatory and toxic foci, etc.)

Thus, fasting-dietary therapy and autolysis relate to the protective, adaptive and trophic function of the body, with the help of which all tissues and organs are cleansed and renewed. According to leading experts in the field of therapeutic fasting, the biological essence of alimentary fasting is adaptive; it should be considered as a variant of stress therapy (according to G. Selye), activating the compensatory and adaptive mechanisms that underlie the processes of sanogenesis.

P.K. Anokhin, K.V. Sudakov (1971) believe that hunger and a feeling of satiety are caused by reflex adaptation and, accordingly, subsequent inhibition of the hypothalamus. It has been established that in the initial stages of complete fasting, the flow of ascending impulses from the adrenergic substances of the reticular formation first spreads to the frontal parts of the cerebral cortex, followed by generalization of the excitation process all over the cerebral cortex.

The sympathoadrenal system plays an important role in achieving a therapeutic effect in FDT. According to the literature, its tone increases in the initial stage of fasting and at the end of the first - beginning of the second stage of the recovery period. Therefore, it is believed that FDT is especially indicated for patients who have reduced tone of the sympathoadrenal system. An increase in the functional activity of the autonomic and central nervous system under the influence of fasting is accompanied by an increase in the body's nonspecific reactivity, some activation of carbohydrate-phosphorus metabolism and oxidative processes, which is essential in achieving and stabilizing the therapeutic effect [1,2,3,4,8,11,14,16,18,23].

8.2. Preparation for fasting-diet therapy

A few days before the start of FDT, it is advisable to switch to a vegetarian diet and begin cleansing procedures.



During therapeutic fasting, you should follow some rules to avoid complications and adverse reactions: carry out cleansing activities, take walks in the fresh air, do massage and self-massage [1,2,3,4,8,11,12].

To clean and sanitize the oral cavity, add ginger powder to toothpaste, dissolve cloves in the mouth, and use oil sucking techniques.

To cleanse the gastric mucosa and prevent gastroesophageal reflux, add 6% apple cider vinegar to drinking water: 1-2 drops per 1 glass of water.

To disinfect the mucous membrane of the small intestine, use a 3% solution of hydrogen peroxide (0.5–1 teaspoon per 50 ml of sweetened boiled water) once a day for 7 days.

In order to cleanse the liver and suppress hunger, use an infusion of corn silk; to cleanse the blood and lymphatic system, diluted grapefruit juice is used for 7 days. At night, it is recommended to cleanse the intestines using a solution of table salt and lemon juice (1 dessert spoon per 1 liter of water). Cleansing enemas are carried out during the entire period of FDT from 3 to 7 times a week. Take a warm bath daily to relax, cleanse the skin, sebaceous and sweat glands.

8.2.1. Fasting phases

The first phase – food arousal – lasts 2–4 days.

On days 1–2, the fasting person is irritated by any mention of food: the sight and smell of food, being in the kitchen, etc. A bad mood occurs, sleep is disturbed, rumbling in the stomach bothers you, and a feeling of sucking or pain appears in the epigastric region. The decrease in body weight is approximately 1 kg per day.

The second phase is increasing acidosis, lasting about 1 week. The feeling of hunger, pain and discomfort in the stomach disappear. Thirst appears. General lethargy and weakness increase. Possible nausea and headache. The decrease in body weight during this period is up to 300–500 g per day.

The third phase - compensation - begins approximately from the 9-10th day of abstinence from food and lasts from 2 to 5-6 weeks. During this period, energy needs are covered by 82% from fats, 15% from proteins, and 3% from carbohydrates of the



body's own. The body uses the least biologically significant tissues (endogenous nutrition) as a source of these substances. At the same time, changes are observed due to dysfunction of the liver, loss of vital proteins by various organs and tissues, and vitamin deficiency. At the same time, metabolism is disrupted and the body's resistance is reduced. During complete abstinence from food, a person loses 15–17 kg of weight.

8.2.2. *Methods of fasting-dietary therapy*

Several FDT methods have been developed for adults; for children over the age of 12, we recommend using the standard method.

1. Standard method, or complete fasting.

Food is completely excluded, but there are no restrictions on water consumption. The duration of such fasting is from 1 to 30–40 days or more, depending on the goals and body weight of the patient.

2. Dry fasting

Complete exclusion of food and water, both in the form of drinking and enemas and other water procedures. The duration of such fasting is 3–4 days.

3. Combined method (dry and complete fasting)

For the first few days - dry fasting, then - transition to regular complete fasting with water consumption. Duration, as with the standard method, depending on the goals. It is characterized by an earlier onset of acidotic crisis and, accordingly, makes it possible to slightly reduce the total duration of fasting.

4. Fractional method (according to G. A. Voitovich).

Provides for several (usually three) cycles (fractions) of complete or combined fasting, following one after another. The first lasts 17–20 days, the second – 17–20 days, the third – from 17 days until signs of the physiological end of hunger appear. Between these cycles, restorative nutrition is carried out using a special method for a period equal to the period of fasting.

5. Staged fasting until crisis.

Complete or combined fasting is carried out until the onset of an acidotic crisis (usually 4–10 days), followed by a period of restorative nutrition lasting half the fasting



period, then the next step until the crisis and again restorative nutrition until half the period, and so on for 3–4 steps. Used for poor tolerance to long-term fasting.

6. Urine fasting (according to G. P. Malakhov).

Avoid food completely and drink all or part of the daily urine. Allowed to drink water. Such fasting for 3–7 days is quite effective in the treatment of certain diseases.

7. Urine fasting (according to V. A. Erofeev).

2 days before the start of fasting, significantly reduce the amount of protein and fried foods. In the morning, drink a medium portion of urine with water. Next, drink all the daily urine, excluding the last portion before bed.

The period of such fasting is 4 - 7 days.

8. Mixed fasting (urine and regular).

During a normal complete fast, in addition to water, you drink up to 200 ml of daily urine per day. The duration of such fasting varies depending on its goals.

9. Intermittent fasting (according to Michael Mosley).

Today, the most well-known options for the interval diet are: 6/18, 8/16, 18/36, 24/24, eating every other day and the 5-day/2-day system. The first number is the number of hours or days when you can eat - the so-called “eating window”, the second – determines the time of complete refusal of food, that is, the period of fasting.

8.2.3. Therapeutic fasting in children

The most acceptable fasting option for children is regular “fasting days” once every 7 or 10 days. This is a gentle method in which progress is achieved slowly, but the improvement is more stable.

As a rule, in case of toxicosis, acute poisoning, fever and other diseases, the child instinctively refuses to eat.

If acute gastrointestinal diseases occur, children are prescribed a fasting water-tea break for 6–24 hours. In this case, the child is given small portions every 10–15 minutes of 5–10% glucose solution, isotonic sodium chloride solution, Ringer's solution or rehydron (1 powder in 200 ml of water).

At the end of the 24-hour period of hunger, a breastfed baby is given expressed



breast milk 10-20 ml every 2 hours on the 1st day, 40-50 ml every 2.5 hours on the 2nd day, and if the condition is satisfactory, you can attach to the breast or feed in accordance with age.

In children who are bottle-fed, medicinal or highly adapted milk formulas are used, which the baby was fed before illness. In the first days, porridge is given without milk; baked apples, compotes, and crackers are introduced into the diet. Dairy and meat products are not recommended. After stool is restored, the child is transferred to his usual diet.

Both on the day of fasting and when leaving it, the child should be given plenty of fluids - the listed solutions or another liquid familiar to him.

When breaking a 1-2 day fast, children over 1 year old are recommended to start eating with fresh fruit or carrot juice. If there is increased secretion of the stomach, it is better to dilute it in a decoction of oats or flax seed. After 15–20 minutes, you can offer any porridge without milk with raisins or dried fruits. Subsequently, the child is given vegetarian soup, vegetables, cereals, bread (not fresh), crackers, and dry biscuits. Meat products can be introduced into the diet after 1–2 days. During hunger, physical activity, emotional stress, and increased insolation should be avoided. It is necessary to use a shower or a warm bath at a comfortable temperature 1-2 times a day (a contrast shower is possible if the child is used to it), walks in the fresh air are recommended, the amount of liquid is not limited (rosehip decoction, water, water with honey, decoction of dried fruits and etc.) [1,2,3,4,5,8,11,14,16].

8.2.4. Intermittent Fasting

It is called differently: **intermittent**, interval, periodic, cyclic fasting, fasting. The essence of this practice is that all time in a day (or days) is divided into intervals of complete refusal of food and periods when a person eats in the usual way without limiting products and to his heart's content. As the representatives of the diet assure, it greatly helps to lose weight, as well as to improve the health of the body.

Today, many world stars practice intermittent fasting: Beyonce, Miranda Kerr, Liv Tyler, Tom Hardy and other celebrities.



As many supporters of the practice assure, by observing cyclical fasting, it is possible to adjust the weight; improve insulin resistance; reduce the level of insulin and sugar in the blood; reduce the amount of bad cholesterol; cleanse the body of harmful toxins and metabolic products; increase brain activity.

It was established that during the transition to intermittent fasting, metabolic processes are accelerated by 10% already within the first three days. Resistance to stress increases, work capacity improves, sleep and mood improve, the whole body feels light. It has a positive effect even on the appearance: hair and nails are strengthened; the skin is healthy and rejuvenated.

This regime was invented by Dr. Michael Mosley and does not include special prohibitions and restrictions. The main thing is to observe the period of food and hunger: 5 days a week you can eat a normal diet, and for 2 days - reduce the daily caloric intake to 500 calories (for men - 700). The author of the technique promises that thanks to such a diet, on average, you can lose up to 1 kg of weight per week, and even more if you take into account good physical activity. It is believed that such a diet is psychologically easier to perceive, since it practically does not involve giving up the usual food [1,2,3,4,5,8].

Among all presented schemes of intermittent fasting, the 16/8 option is the most popular. Not everyone can handle a 24/0 or 36/0 schedule. It is most often used when you need to lose weight very quickly. Even significantly reducing calorie intake for 2 days a week according to Michael Mosley's method is not for everyone: it is necessary to constantly calculate the number of calories eaten, think about what and when to eat.

Proponents of the 16/8 diet note its simplicity, convenience and effectiveness. The absence of strict restrictions on the choice of products, the ability to independently choose the schedule of the food window (it is easier for one to eliminate breakfast from life, for others - dinner) - all this eliminates the stress factor that is invariably present in strict diets and makes this option of intermittent fasting the most attractive.

8.2.4.1 Disadvantages of intermittent fasting

Unfortunately, despite the many advantages of intermittent fasting, it has its disadvantages, namely:



✓ There is insufficient research on benefits for all categories of the population.

✓ There is a danger of an unbalanced diet.

✓ At first, it is psychologically difficult to withstand daily fasting.

✓ It is necessary to ensure that calories are not exceeded.

✓ There is a risk of improper nutrition with fast food and sweets.

✓ It will be difficult for those who are used to eating small and often according to the time schedule.

✓ Losing weight while fasting threatens with a decrease in muscle mass, so regular physical activity is necessary.

✓ There are contraindications for a number of diseases.

✓ With long-term practice, stagnation of bile and the development of gallstone disease are possible.

✓ Not suitable for pregnant and lactating women.

✓ Prolonged refusal of food can lead to headaches, stress, discomfort in the stomach and intestines, heartburn and belching.

8.2.4.2 Possible harm from intermittent fasting

Each organism is individual, so the Intermittent Fasting technique is not suitable for everyone.

Following this diet, some people have noticed the following negative effects:

✓ Increased cortisol levels. The stress hormone cortisol in high concentration weakens the immune system and also contributes to the accumulation of fat reserves.

✓ A decrease in sensitivity to insulin is possible, which can lead to diabetes

✓ Hair loss.

✓ Violations in the female cycle.

✓ Sleep disorders (decreased REM sleep phase duration).

✓ One of TREA's clinical trials showed that for people diagnosed with obesity, intermittent fasting did not work at all, they did not lose weight or improve their



metabolism.

8.2.4.3 The main contraindications for Intermittent fasting are:

- ✗ stomach diseases;
- ✗ gall bladder and adrenal gland diseases;
- ✗ diabetes, hypertension, gout;
- ✗ body mass index is less than 18.5;
- ✗ eating disorders or amenorrhea in history;
- ✗ pregnancy and breastfeeding;
- ✗ regular medication;
- ✗ age up to 18 years.

8.3. Side effects of fasting

During therapeutic fasting, an exacerbation of some chronic diseases is possible.

With a tendency towards arterial hypertension or a rapid decrease in blood pressure, a collapse and cardiac arrhythmia may occur. With a rapid change in body position, orthostatic collapse occurs. For preventive purposes, patients are advised to get up slowly and not make sudden movements. The patient is removed from the collapse using generally accepted means.

During the period of restorative nutrition, some complications may be caused by violations of diet and nutrition. It is important to prevent this because of the risk of dyspeptic symptoms. If signs of dyspepsia appear, it is necessary to rinse the stomach and prescribe a laxative. Sometimes it is advisable to do a one-day fast. Complications include swelling of the subcutaneous tissue due to premature consumption of table salt. Swelling is more pronounced on the face, under the eyes, and disappears within 24 hours when a salt-free diet is prescribed.

In case of complications caused by exacerbation of the underlying disease, it is advisable to stop fasting and prescribe adequate therapy.



If signs of exacerbation of the underlying disease are slightly expressed, adequate pharmacotherapy can be prescribed against the background of therapeutic fasting.

Let's take a closer look at the most common side effects of fasting.

Headache. Quite often it occurs at the beginning of fasting, especially among beginners and when preliminary cleansing procedures are insufficient, it indicates significant contamination of the body. An enema helps a lot. If you have a severe headache, you can drink a glass of warm boiled water with a teaspoon of honey. If the pain does not stop, it is necessary to stop fasting, carry out cleansing procedures and continue one-day fasting once a week for 1–3 months.

Dizziness, fainting. They occur more often in tall children when standing up suddenly or changing body position. It is recommended to stand up slowly and not make sudden movements.

General weakness. Quite a common occurrence during fasting. Occurs periodically during any period of fasting, especially often with excessive physical and mental stress, insufficient exposure to fresh air. More pronounced in the early stages of fasting. In principle, weakness during fasting is normal. You need to spend more time in the fresh air, take sunbathing, if possible, do massage and self-massage, do not overwork, and rest.

Chills, fever. Chills and fever are very common occurrences and can replace one another during different periods of fasting. They are caused by changes in metabolic processes in the body and depend on the constitution of a person and his water regime. It is recommended not to overcool, dress well, and exercise sufficiently. Sometimes a warm drink or reducing the amount of water you drink per day helps with chills. Overcooling must not be allowed.

Bad breath. Bad breath is a common occurrence during fasting, especially in its early stages. Caused by the abundant intake of fat breakdown products into the blood. After an acidotic crisis, its severity decreases significantly. Bad breath persists throughout the entire fasting period, although its intensity decreases over longer periods. They recommend enemas, breathing exercises, exposure to fresh air, water treatments, and underwear made from natural fabrics.



Convulsions. Occasionally, with a long duration of therapeutic fasting, tonic convulsions may occur, which is due to the excretion of sodium chloride, calcium and phosphorus salts from the body. In this case, first there are cramps in the fingers of the upper extremities, then in the calf muscles, and sometimes in the masticatory muscles. A 1% solution of table salt is prescribed, which is given warm, 20 ml orally once or twice.

Muscle pain. Muscle pain is possible throughout the entire period of fasting, more often with longer fasting and increased physical activity. Caused by a slowdown in metabolic processes. To reduce the intensity of pain, it is recommended to reduce physical activity, use massage, self-massage, and thermal procedures.

Pain in the spine, joints. Pain in the spine and joints occurs rarely, more often in patients with diseases of the joints and spine. Disappears quickly. They recommend massage, thermal procedures, and gentle physical activity.

Pain of various localizations. Pain of various localizations is a fairly common occurrence, caused by the healing process of a particular organ. Rarely very strong. It is recommended to continue fasting until the pain stops.

Toothache. Before starting a long fast, you should sanitize your oral cavity and fill problem teeth. Sometimes there is discharge of pus from the paranasal sinuses and affected gums. No special measures are required; you should rinse your mouth with water or a solution of lemon juice or chamomile. While fasting, you should brush your teeth carefully. Due to changes in the composition of saliva, tooth enamel may dissolve. The plaque performs a protective function. You can wipe your teeth with gauze, rinse your mouth with infusion of chamomile and St. John's wort. The use of any toothpastes is prohibited.

Sleep disorders. Sleep disturbances are common during fasting. Some people experience increased activity during fasting, while others experience drowsiness. No special events required. If you feel drowsy, you need to rest more often; if you don't sleep, you should rest in bed. Lack of sleep should be taken more seriously after 20 days of fasting. If there is severe insomnia for 3-4 days, combined with increased excitability, you should stop fasting.



Belching, heartburn, vomiting. Quite often, in the first 4–5 days of fasting, persistent belching and heartburn occur, especially in the presence of stomach diseases and during the first fasting sessions. To prevent these phenomena, it is necessary to rinse the stomach - drink warm water and induce vomiting. If this does not help within a few days, you can add small amounts of still mineral water. Persistent heartburn may appear later in the fast, which often indicates insufficient cleansing procedures. You should break the fast, take measures to cleanse the digestive canal and follow the correct diet. Typically, these symptoms gradually disappear with subsequent fasting sessions.

Children with liver diseases may vomit greens, which indicates that the organ has begun to cleanse. You should wait out such an exacerbation, fast for a couple more days, do gastric lavage, apply a warm heating pad to the liver, and do a cleansing enema.

Cardiopalmus. The heart rate during fasting usually decreases after a crisis. Before a crisis, due to severe intoxication, an increase in heart rate during physical activity is often noted. For prevention, you should not overwork and do the right amount of physical exercise.

Heartache. Heart pain is rarely intense and disappears on its own. In case of severe pain and arrhythmia, it is necessary to conduct an electrocardiogram and, in accordance with its results, decide whether to continue fasting. Most often, arrhythmias are observed in patients with heart disease; they can be caused by a lack of potassium. Asparkam and panangin are used. If there is no effect within 1 - 2 days, they begin to break the fast in combination with the prescription of potassium supplements.

Renal colic. Patients with kidney stones must maintain sufficient water intake, especially before an acidotic crisis. If pain occurs, a warm bath, dry heat on the lumbar region, and antispasmodics are prescribed.

Colds, sore throat. Colds are extremely rare. Sometimes catarrhal tonsillitis occurs, you should gargle with 3-5% sodium bicarbonate, chamomile solution, and continue fasting until the symptoms stop.

To avoid complications, it is necessary to carry out preliminary cleaning



procedures.

If complications occur, it is advisable to follow the following basic rules: if they are minor, you should continue fasting until they disappear; if they are significant, you should begin restorative nutrition in compliance with the correct regimen and carry out the necessary cleansing procedures [1,2,3,4,5,8].

8.4. Exiting fasting

Coming out of fasting is an extremely important period, since the effectiveness of the entire process depends on it. Exiting fasting incorrectly can lead to serious consequences. There are known cases of death due to improper recovery from fasting, for example, if a person got lost in the taiga and starved for 20 days, and then immediately attacked solid food.

The period of recovery from fasting must be equal to the duration of fasting in order to perform all restorative functions: removing free toxins from the body; ensuring a gradual transition to a daily menu; starting normal digestion; restructuring the body to external sources of energy and nutrition; restoration of function of all organs, reduction of health risks; mitigation of stress received by the body; reducing the risk of complications. At the very beginning of coming out of hunger, when drinking the first drink, you can feel a strong attack of hunger. This occurs due to the fact that the digestive receptors begin to sense the taste of food again, and the stomach sends signals to the brain. The process must be controlled so as not to disrupt the digestive system. It is very important to take vitamins and minerals throughout the entire process!

At the end of fasting, there are still substances in the blood that are toxic to the body. If you do not observe the recovery period, then all the toxins from the blood will return to the cell and the whole process will be in vain.

8.4.1. When to start breaking out of fasting?

During the fasting process, it is important not only to follow the system, but also



to listen to your feelings. When choosing a specific period, you must understand that the authors of all methods give a conditional period. But in reality, everyone has their own individual characteristics of the body, which are worth focusing on.

It is necessary to break fasting in the following cases:

- ✓ if there is a sudden feeling of hunger that has not been there for several days;
- ✓ weight loss began, more than half a kilo a day;
- ✓ the process itself has become stressful for the body;
- ✓ the coating on the tongue has disappeared;
- ✓ the sclera of the eyes became clean and cleared of turbidity;
- ✓ urine became light and no longer had a strong smell;
- ✓ there were pains in the heart.

If these signs are present, the process should be completed, since for the body it is already completed and, if exited correctly, will give all the necessary positive results.

There are times when the fasting process must be urgently interrupted. Fasting should be terminated if there is a sharp deterioration in the condition, daily fainting, vomiting with blood or tachycardia. However, with an urgent cessation of fasting, the process is considered unfinished [1,2,3,4,5,8,18].

8.4.2. Recovery process

Most experts believe that the recovery process should last as long as the fast itself or even twice as long. The output is divided into three main phases:

✓ Juice diet. The first days you need to drink water with sugar, then you can switch to diluted vegetable or fruit juices. You should not drink undiluted juices, as they can be very irritating to the stomach and intestines due to the presence of organic acids or tannins, depending on the type of juice. Filtered and diluted rosehip decoction is also good. You should drink the liquid through a straw and in small sips, the first days 2 glasses per day, then add one glass daily.

✓ Liquid diet phase. Gradually you need to switch to liquid and pureed dishes. The diet includes vegetable broths without spices, then liquid porridge with water and



jelly. It is important to increase caloric intake gradually during this phase, adding no more than 100 kcal per day.

✓ Transition to solid foods. They still eat in small portions. Food should be steamed or boiled; only lean meat is allowed; it is better to eat it pureed. During this period, porridges are prepared thicker, and vegetables are added to soups. You can start consuming fermented milk products. The diet is similar to diet No. 1 (table No. 1 according to Pevzner), which is designed for the recovery period after acute gastritis: the main principle is the principle of mechanical, thermal and chemical sparing of the stomach, therefore vegetables and fruits with coarse fiber, bran, fatty meat, spicy, sour, salty foods, etc. Food should be soft and not require much digestion.

It is better to introduce legumes, meat and other heavy foods into the menu as late as possible.

There are other recommendations to make the process easier: it is better to eat while sitting; meals should be fractional; you need to chew food thoroughly; You should avoid dishes with a lot of ingredients.

If you strictly follow all the rules, then breaking out of fasting will not be difficult, and the body will easily adapt.

In order to consolidate the effect of therapeutic fasting, after completing the course, it is advisable to follow a vegetarian diet for some time.

For therapeutic and preventive purposes, a one-day (24 hour) fast is recommended. It is used for acute gastritis, enterocolitis, gastric bleeding, acute cholecystitis, pancreatitis, cardiac asthma, myocardial infarction, and excess body weight. If tolerated, one-day fasting can be done weekly. It is important to keep in mind that, as with long-term fasting, a recovery period is necessary. Therefore, in the 1st meal after a daily fast, it is advisable to eat only salad and boiled or stewed vegetables; in the 2nd meal, you can include meat or other products of animal origin.

8.4.3. In conclusion, we give an example of a recovery diet when leaving a 7-day fast

First day: during the day, drink juice diluted with water in a ratio of two to three.



The more diluted the juice, the better. The interval between doses should not be more than two hours. At the end of the day, the juice can be diluted with water in a one to one ratio.

Second day: before lunch, juice diluted one to one with water, a total of 2-3 doses, after lunch, grated fruits or vegetables.

Third day: vegetables and fruits, which it is also advisable to grate; porridge with water or dried fruits can be added to the diet.

Day four: you can add bread and vegetable soups to your diet.

Fifth day: you can eat boiled vegetables and fermented milk products.

Sixth day: cheese in small quantities and sour cream are introduced into the diet.

Seventh day: you can add eggs and cottage cheese to the food. After the 7th day of the recovery period, foods high in protein are gradually introduced into the diet: first fish, legumes, and then poultry and meat.

8.5. Therapeutic nutrition

It is known that improper nutrition can cause many diseases, Xiao, YL., Gong, Y however, rationally selected food is a medicine for a person. The therapeutic effect of food products is determined by their qualitative and quantitative composition (proteins, fats, carbohydrates, vitamins, minerals, microelements, etc.), caloric content, physical properties (volume, temperature, consistency), diet (meal times, distribution of food during the day, frequency of intake), the influence of individual products. Proper nutrition for many diseases is the basis of a complex of therapy or is its basis.

The founder of diet therapy was M. I. Pevzner, who developed a system of diets in the 20s of the last century. M. I. Pevzner wrote that "...the patient's nutrition is the main background against which other therapeutic factors should be applied. Where there is no therapeutic nutrition, there is no rational treatment."

Despite the discoveries of genetics and microbiology, Pevzner's diet therapy is still actively used today for various acute and chronic diseases.



M. I. Pevzner proposed 15 therapeutic diets, each with its own number, dedicated to a special food system. Diet No. 0 is included in this category, which is used for patients after surgical procedures. All Pevzner's diets are based on the principles of physiological completeness and therapeutic specificity of nutrition. [1,2,5,9,17,22,24].

Regardless of the diet number, it is recommended to eat small meals - in small portions 5-6 times a day. It is necessary to cook urchins by boiling, steaming, stewing. Baking is also allowed, but without added oil. In Pevzner's diets, the consumption of alcoholic beverages is prohibited; sausages and fatty foods, herbs and spices, fried and smoked, butter pastries.

Characteristics of basic therapeutic diets.

ZERO DIETS

Indications for use: condition after operations on the digestive organs, semi-conscious state.

Purpose: providing the body with a minimum amount of nutrients in the presence of contraindications to the intake of solid food; maximum unloading of the digestive organs, prevention of flatulence.

DIET #0A

Cooking: liquid and gelatinous food.

Diet: fractional meals, 7-8 times a day, with a temperature no higher than 45°C; no more than 200-300 g per meal.

Recommended: weak low-fat meat broth, slimy decoctions with cream, fruit and berry jelly, fruit and berry juices, fruit jelly, rosehip decoction with sugar. Exclude: whole milk, dense and pureed dishes, carbonated drinks.

DIET #0B

Diet: Allow up to 350-400 g of warm food 6 times a day; Prescribed after Diet #0A.

Recommended: In addition to the products and dishes of Diet #0a, slimy cereal soups on vegetable broth, liquid strained cereal porridges (buckwheat, rice, rolled oats), steamed protein omelet, soft-boiled egg, steamed soufflé or puree from lean meat and fish, mousses from non-acidic berries.



DIET #0B

Diet: Allow up to 6 warm meals a day; Prescribed after Diet #0B as a transitional stage to physiologically complete nutrition.

Recommended: pureed soups, cream soups, steamed dishes of pureed boiled meat and fish, steamed dishes of cottage cheese, cottage cheese pureed with cream, fermented milk drinks, baked apples.

DIET #1A

Indications for use: peptic ulcer, acute gastritis, exacerbation of chronic gastritis and gastroduodenitis, condition after stomach surgery, esophageal burn.

Intended use: by maximizing mechanical and chemical sparing of the alimentary canal, promote reparation of the mucous membrane and reduce the reflex excitability of the stomach, reduce interoceptive stimuli emanating from it.

General characteristics: limitation of energy value mainly due to carbohydrates and to a minor extent - proteins and fats.

Exclude: products that are strong stimulants of gastric secretion, having an irritating mechanical, chemical and thermal effect on the gastric mucosa. Cooking: boiled or steamed food, liquid and semi-liquid consistency. Diet: the diet involves bed rest. Food is taken every 2-3 hours 6 times a day in small portions, warm. Bread and flour products are excluded. Recommended: lean meats (beef, veal, rabbit meat) without tendons, fascia and fat; poultry is peeled and consumed as mashed potatoes or steamed soufflé from boiled meat once a day; steamed soufflé from boiled lean fish (pike perch, etc.) once a day (instead of meat); soft-boiled eggs or as a steamed omelet (up to 3-4 pcs. per day); milk, cream, steamed curd soufflé. unsalted butter, well-refined olive oil in its natural form, added to dishes; liquid milk porridges from semolina, rice and buckwheat flour, oatmeal; homogenized vegetables; slimy soups and decoctions in milk from rice, pearl barley and oatmeal ("Hercules"); sugar, honey, milk jelly: jelly, kissel, mousse on gelatin from non-acidic berries and fruits; decoctions of rose hips, wheat bran, soy, fresh non-acidic fruits and berries, diluted with water and sugar, weak tea with milk or cream. Exclude: dishes from fatty meats and poultry;



cheese and fermented milk products (kefir, yogurt, sour cream, cottage cheese); pasta, legumes and other porridges; broths from meat, chicken, fish, vegetables, mushrooms; raw fruits and berries; sauces and spices; coffee, cocoa, kvass, carbonated drinks.

DIET #1Б

Indications for use: peptic ulcer in the acute stage (after using diet #1A for 8-12 days), acute gastritis, exacerbation of chronic gastritis, condition after stomach surgery.

Purpose: by maximizing mechanical and chemical sparing of the stomach, to promote the repair of the mucous membrane and reduce the reflex excitability of the stomach, reducing the interoceptive irritations emanating from it.

General characteristics: moderate restriction of energy value, mainly due to carbohydrates with normal protein and fat content.

Exclude products that are strong stimulants of gastric secretion, which have an irritating mechanical, chemical and thermal effect on the gastric mucosa.

Cooking: boiled or steamed food, semi-liquid and puree like consistency

Diet: food is taken every 2-3 hours 6 times a day in small portions, warm, in semi-bed rest.

Recommended and excluded products and meals.

Bread and flour products. Recommended: white rusks and dry biscuit 70-100 g.

Meat and poultry. Recommended: lean meats (beef, veal, rabbit meat) without tendons, fascia and fat, skin poultry, eat in the form of mashed potatoes or steamed soufflé from boiled meat once a day, quenelles, meatballs, mashed potatoes. Exclude: other meat and poultry dishes.

Fish. Recommended: steamed soufflé from boiled lean fish (pike perch, etc.) once a day (instead of meat). Exclude: fatty types and other dishes.

Eggs. Recommended: soft-boiled or in the form of a steamed omelet (up to 3-4 eggs per day). Exclude: in other forms.

Dairy products. Recommend: milk, cream, steamed cottage cheese soufflé, strained cottage cheese. Exclude: cheese and fermented milk products (kefir, sour milk, sour cream).

Fats. Recommend: unsalted butter, well-refined olive oil in its natural form, added



to dishes. Exclude: other varieties.

Cereals, pasta and legumes. Recommend: liquid milk porridges from semolina, rice and buckwheat flour for baby food, oatmeal. Exclude: pasta, legumes and other porridges.

Vegetables. Recommend: homogenized (baby food). Exclude: in other forms.

Soups. Recommend: strained broths in milk from rice, pearl barley and oatmeal (rolled oats). Exclude: broths from meat, chicken, fish, vegetables, mushrooms.

Fruits, sweet dishes and sweets. Recommended: sugar, honey, milk jelly: jelly, jelly, gelatin mousse from non-acidic berries and fruits. Exclude: raw fruits and berries.

Sauces and spices – excluded.

Drinks. Recommended: decoctions of rose hips, wheat bran, soy, fresh non-acidic fruits and berries, diluted with water and sugar, weak tea with milk or cream. Exclude: coffee, cocoa, kvass, carbonated drinks.

DIET #1

Indications for use: peptic ulcer and chronic gastritis with normal and increased gastric secretion in the phase of abating exacerbation and remission (for 3-5 months); chronic gastritis with insufficient secretory function in the exacerbation phase; acute gastritis during the recovery period; after gastric surgery in the recovery phase (after diets 1A and 1B).

Intended use: by mechanically and chemically sparing the stomach, promote reparation of the mucous membrane and reduce the reflex excitability of the stomach, reduce interoceptive stimuli emanating from it.

General characteristics: a diet with sufficient energy value and a normal ratio of essential nutrients. Chemical and thermal food irritants, strong stimulants of gastric secretion are excluded. Mechanical sparing of the stomach is less strict than in diet #1b.

Cooking: food is steamed or boiled, served pureed.

Diet: 5-6 meals a day, food is served warm.

Recommended and excluded products and meals

Bread and flour products. Recommended: wheat bread made from premium and first grade flour, baked the day before or toasted; plain buns (12 times a week); dry



sponge cake, plain cookies. Exclude: rye bread, fresh bread, pancakes, pies, cakes, pastries. Meat and poultry. Recommended: lean meats (beef, veal, rabbit meat without tendons, fascia, skinless chicken and turkey, boiled or steamed, mashed cutlets, quenelles, meatballs, mashed potatoes, soufflé, roll, etc.), veal, rabbit, boiled chicken in one piece, beef stroganoff from boiled meat, boiled and steamed tongue and liver. Lean, non-stringy, unsalted ham; diet sausages, finely chopped; meat cheese, liver pate. Exclude: fatty and sinewy meats and poultry, fried and stewed, canned goods.

Fish. Recommended: lean skinless varieties in pieces or as cutlets, boiled or steamed, jellied in vegetable broth. Lightly salted granular caviar in small quantities. Exclude: fatty varieties, smoked, salted, fried, stewed.

Eggs. Recommended: soft-boiled or as a steam omelet, fried eggs (2 eggs per day). Exclude: in other forms.

Dairy products. Recommended: whole milk, cream, one-day-old yogurt, fresh non-acidic sour cream and cottage cheese in dishes (lazy vareniki, casserole, pudding, etc.), mild grated cheese. Exclude: high-acid dairy products, sharp cheeses.

Fats. Recommended: unsalted butter, refined olive and sunflower oil in natural form or added to dishes. Exclude: other varieties, fried butter.

Cereals, pasta and legumes. Recommended: porridge cooked in milk or water - semolina, well-boiled rice, mashed buckwheat, "oatmeal"; steamed puddings, soufflé, cutlets made from ground cereals. Boiled chopped pasta. Exclude: millet, pearl barley, barley, buckwheat, whole, legumes, pasta.

Vegetables. Recommended: beets, potatoes, carrots, cauliflower, green peas, boiled in water or steamed and mashed (mashed, soufflé); steamed puddings; zucchini and pumpkin, cut into pieces, boiled; and ripe non-acidic tomatoes in small quantities. Exclude: other vegetables, salted, pickled, marinated vegetables and mushrooms, canned vegetables.

Soups. Recommended: from mashed vegetables, milk, cereal, mashed from vermicelli or homemade noodles with the addition of permitted mashed vegetables; milk puree soups, vegetable soups, from pre-boiled chicken or meat; seasoned with butter, non-acidic sour cream, egg yolk.



Exclude: on meat, chicken, fish broth, mushroom and strong vegetable pairs, borscht, cabbage soup.

Fruits, sweet dishes and sweets. Recommended: ripe sweet fruits and berries in the form of puree, jelly, jellies, mousses, strained compotes, sweet dishes on whipped egg whites, whipped cream, creams, milk jelly, sugar, honey, jams and preserves from sweet berries. Exclude: raw berries and fruits, sour and unripe, chocolate, halva, unstrained dried fruits.

Sauces and spices. Recommended: milk, sour cream, egg-and-butter sauces; dill; vanillin. Exclude: other sauces and spices.

Drinks. Recommended: weak tea with milk or cream, weak cocoa with milk, sweet fruit and berry juices, rosehip decoction, wheat bran. Exclude: coffee, carbonated drinks, juices of sour berries and fruits.

DIET #2

Indications for use: chronic gastritis with decreased gastric secretion outside the acute phase, enterocolitis outside the acute phase; dysfunction of the masticatory apparatus, recovery period after acute infections and surgeries.

Purpose: stimulation of secretion and normalization of motor function of the stomach and intestines, reduction of fermentation processes in the intestines.

General characteristics: a diet with a complete energy value and chemical composition, with moderate mechanical and thermal sparing while maintaining [1,2,4,5,6,21,24].

Culinary processing: boiling, stewing, baking, fried dishes - without a rough crust; chopped dishes, steamed dishes.

Diet regimen: fractional meals 4-5 times a day, warm.

Recommended and excluded products and meals

Bread and flour products. Recommended: wheat bread made from premium and first grade flour, baked yesterday, or dried; non-sweet bakery products (1-2 times a week); dry biscuits, cookies. Exclude: coarse rye bread, products made from fresh sweet and puff pastry, pancakes, crepes.

Meat and poultry. Recommended: lean meats - minced beef: cutlets, patties,



lightly fried; veal, rabbit, chicken, turkey, boiled, stewed, steamed, baked, fried. Fried without breading, boiled tongue, jellied meat, beef jelly, meat and liver pate, lean ham, sausages: doctor's and dietary, dairy sausages. Exclude: fatty and sinewy meats (lamb, pork, goose, duck), canned food, smoked meats.

Fish. Recommended: lean, boiled, stewed, jellied, fried. Exclude: fatty fish, smoked, salted, dried, smoked, canned fish.

Eggs. Recommended: soft-boiled eggs, scrambled eggs, fried and baked omelet. Exclude: hard-boiled.

Dairy products. Recommended: milk in various dishes, with tea and other drinks, kefir, yogurt, acidophilus, fresh non-acidic strained cottage cheese in its natural form and in dishes, non-acidic sour cream in dishes, mild strained cheese. Exclude: whole milk and cream, ice cream.

Fats. Recommended: ghee, refined vegetable oil. Exclude: other varieties, fried oil.

Cereals, pasta and legumes. Recommend: mashed or boiled porridge; boiled vermicelli and noodles; baked puddings, cutlets made from vermicelli and cereals. Exclude: pearl barley, buckwheat, cereals, legumes.

Vegetables. Recommend: beets, carrots - boiled, baked, stewed. Potatoes in limited quantities in the form of mashed potatoes, cutlets (lightly fried); boiled cauliflower with butter, stewed zucchini and pumpkin. Ripe fresh, raw tomatoes. Exclude: rich in coarse vegetable fiber or essential oils (cucumbers, turnips, radishes, horseradish, peppers, etc.), pickled mushrooms.

Soups. Recommend: on meat and fish broths, vegetable and mushroom broths, potatoes, with mashed cereals, finely chopped or mashed vegetables, vermicelli, meatballs. Exclude: dairy, pea, bean, lentil, okroshka.

Fruits, sweet dishes and sweets. Recommend: ripe raw fruits and berries in the form of puree, soft varieties without skin, not mashed, mashed compotes, mashed dried fruits, baked apples, sugar, honey, jam, pastille, marshmallow, marmalade. Exclude: hard berries, fruits, berries with coarse grains and coarse skin.

Sauces and spices. Recommend: sauces on meat and fish broths, mushroom and



vegetable broths, sour cream, white with lemon, citric acid, cinnamon, cloves, bay leaf, vanillin. Exclude: fatty and hot sauces, pepper, mustard, horseradish.

Drinks. Recommend: tea, coffee, cocoa on water with milk, rosehip broth, fruit, berry, vegetable juices. Exclude: carbonated drinks, grape juice.

DIET #3

Indications for use: alimentary, habitual constipation and some diseases of the rectum in the absence of other diseases of the digestive organs.

Intended purpose: stimulation of intestinal motility by including mechanical, thermal and chemical irritants in the diet.

General characteristics: a diet that is complete in energy value and chemical composition, including products rich in coarse plant fiber that stimulate intestinal peristalsis. Culinary processing: varied, without restrictions. Diet: meals 4 times a day.

Recommended and excluded products and meals

Bread and flour products. Recommended: rye bread, whole wheat bread.

Meat and poultry. Recommended: various, preferably sinewy, in pieces, poultry with skin, offal dishes, jellied meat, sausages, frankfurters, ham.

Fish. Recommended: low-fat, variously prepared, smoked herring, sprats, sardines in oil, fish roe.

Eggs. Recommended: hard-boiled eggs, scrambled eggs.

Dairy products. Recommended: one-day fermented milk drinks, cream, sour cream, cottage cheese, cheese.

Fats. Recommended: ghee, vegetable oil and axunge.

Cereals, pasta and legumes. Recommended: pearl barley, buckwheat, millet, barley in the form of crumbly porridges, legumes. Exclude: rice, oatmeal, semolina porridge, pasta, sago.

Vegetables. Recommended: any, especially beets, cabbage, radish, cucumbers, seaweed in the form of caviar, salads, vinaigrettes with vegetable oil, canned.

Soups. Recommended: vegetable, fruit, legume, beetroot soup, okroshka, borscht, shchi, mainly cool. Exclude: slimy soups.

Fruits, sweet dishes and sweets. Recommended: raw fruits and berries, compotes,



jelly, baked apples, ice cream, jam, honey, syrups. Exclude: blueberries, quince, pomegranate, dogwood, lingonberries, pears, jelly, chocolate.

Sauces and spices - various. Drinks. Recommend: weak tea, coffee, kvass, cool carbonated drinks.

DIET #4

Indications for use: chronic colitis and enterocolitis in the acute phase, acute gastroenterocolitis at the onset of the disease, dysentery, typhoid fever, intestinal tuberculosis.

Intended purpose: maximum mechanical, chemical, thermal

sparing the intestines, creating conditions to eliminate the inflammatory process and restore impaired functions, reducing fermentation and putrefactive processes in the intestines. [1,2,4,5,6,21,24]

General characteristics: reducing energy value mainly due to carbohydrates and fats. Exclude mechanical, chemical and thermal irritants, products that promote fermentation and putrefactive processes in the intestine, hard-to-digest food, strong stimulants of bile secretion, secretory function of the stomach and pancreas, as well as substances that irritate the liver.

Culinary processing: steamed, boiled, liquid, mashed or pureed dishes.

Diet: fractional meals in warm form up to 56 times a day while staying in bed.

Recommended and excluded products and meals

Bread and flour products. Recommended: premium wheat bread, yesterday's baked goods, wheat bread rusks, plain biscuits. Exclude: fresh rye bread, pastries made from sweet dough, pancakes, crepes

Meat and poultry. Recommended: lean meats - beef, veal, chicken, turkey, mashed and chopped, boiled in water or steamed with rice added to the mince instead of bread, mince minced 2-3 times with a fine grate, boiled chicken; jellied meat. Exclude: fatty and sinewy meats (lamb, pork, goose, duck), canned food, smoked meats, ham, sausage.

Fish. Recommended: lean, chopped and mashed, boiled in water or steamed, jellied, lightly salted granular caviar. Exclude: fatty types, smoked, salted, pickled,



canned fish.

Eggs. Recommended: soft-boiled eggs, steamed. Exclude: raw, fried, hard-boiled.

Dairy products. Recommended: acidophilus milk and paste, calcined mashed cottage cheese. Exclude: whole milk and cream, sour cream, one-day kefir, cheese.

Fats. Recommended: butter in its natural form and in ready-made dishes. Exclude: other varieties.

Cereals, pasta and legumes. Recommended: rice, semolina, oatmeal, mashed buckwheat, cooked in water or low-fat broth, in the form of steamed puddings, boiled vermicelli. Exclude: pearl barley, millet, barley, crumbly porridge, pasta.

Vegetables. Recommended only boiled as part of soups.

Soups. Recommended: on weak low-fat meat, chicken or fish broth with rice, semolina, vermicelli, meatballs. Slimy soups on the same broths with butter. Exclude: on strong and fatty broth, milk with vegetables, cold legumes.

Fruits, sweet dishes and sweets. Recommend: applesauce, jelly, jelly from juices of non-acidic berries and fruits, decoctions of dried black currants, blueberries, dogwood, quince, bird cherry. Exclude: fresh fruits and berries, dried fruits, compotes, honey, jam and other sweets.

Sauces and spices. Recommend: butter, low-fat broth. Exclude: spices.

Drinks. Recommend: tea, coffee, cocoa on water, juices of non-acidic berries and fruits diluted with water, decoctions of dried black currants, blueberries, bird cherry, dogwood, quince, rose hips. Exclude: coffee and cocoa with milk, kvass, grape juice, carbonated and cold drinks.

DIET #4B

Indications for use: chronic colitis and enterocolitis in the mild exacerbation phase, acute enterocolitis in the improvement phase, in combination with these diseases with damage to the stomach, pancreas, liver and biliary tract.

Intended purpose: moderate mechanical, chemical sparing of the intestines, creating conditions to reduce the severity of the inflammatory process, limiting fermentation and putrefactive processes in the intestines, eliminating disorders of the functional state of the intestines and other digestive organs [1,2,4,5,6,21,24].



General characteristics: a diet complete in energy value and chemical composition with a slight restriction of the amount of salt. Moderately limit the amount of hard-to-digest food, mechanical, chemical and thermal irritants of the gastric mucosa and the receptor apparatus of the digestive tract, products and dishes that promote fermentation and putrefactive processes in the intestines, stimulate bile secretion, the secretory function of the stomach, pancreas and irritate the liver.

Culinary processing: boiled or steamed food, liquid, baked without a rough crust, dishes in chopped or mashed form. Diet: fractional meals up to 5-6 times a day.

Recommended and excluded products and meals

Bread and flour products. Recommended: wheat bread baked the day before, dry sponge cake, dry cookies 1-2 times a week, if tolerated, limited well-baked unsweetened buns or pies with cottage cheese, boiled meat and egg, apples.

Meat and poultry. Recommended: lean beef, chicken minced and mashed, steamed, baked, lightly fried without breading. Veal, rabbit, chicken, tongue in a piece - boiled and stewed. Exclude: fatty meats, goose, duck, canned food, smoked meats, sausage.

Fish. Recommended: lean in a piece, boiled, jellied, chopped, chum salmon and black caviar. Exclude: fatty foods, smoked, salted, pickled, canned.

Eggs. Recommend: soft-boiled eggs, baked and steamed omelettes. Exclude: raw, fried, hard-boiled.

Dairy products. Recommend: milk, cream, non-acidic sour cream in small quantities, only in dishes, fermented milk drinks with an acidity of no more than 90% according to Turner, freshly prepared cottage cheese, curd paste, steamed or baked curd pudding, mild cheese. Exclude: milk, cream, sour cream in natural form, fermented milk products with high acidity, spicy cheese.

Fats. Recommend: butter in natural form and in ready-made dishes. Exclude: other varieties.

Cereals, pasta and legumes. Recommend: rice, semolina, oatmeal, mashed, boiled in water with the addition of 1/2-1/3 milk, puddings, casseroles with cottage cheese. Boiled vermicelli and noodles. Exclude: pearl barley, millet, buckwheat, barley,



semolina porridge, pasta, legumes.

Vegetables. Recommend: carrots, cauliflower, zucchini, pumpkin, boiled and mashed potatoes, soufflé from mashed vegetables, ripe raw tomatoes. Exclude: radish, radish, cabbage, beets, turnips, rutabagas, cucumbers, sorrel, spinach, onions, mushrooms.

Soups. Recommended: on a weak low-fat meat or fish broth, vegetable broth with well-cooked cereals, vermicelli, noodles, finely chopped vegetables, meatballs. Exclude: dairy, legumes, rassolnik, borscht, shchi, okroshka, beetroot soup. Fruits, sweet dishes and sweets. Recommended: ripe berries and fruits of sweet varieties in raw form in small quantities if tolerated. Fresh apples, mashed or baked. Kissels, jelly, mousses, mashed compotes from non-acidic berries and fruits. Snowballs and meringues. Marmalade, marshmallow, pastille. Jams and preserves from sweet varieties of berries and fruits. Sugar in small quantities. Exclude: grapes, apricots, peaches, plums, melons, watermelons, berries with coarse grains, dried fruits, honey, ice cream, cream products.

Sauces and spices. Recommend: on vegetable broth and meat broth, sour cream, béchamel, fruit. Dill, parsley, bay leaf, cinnamon, vanillin. Exclude: hot and fatty sauces, pepper, horseradish, mustard.

Drinks. Recommend: tea, coffee, rosehip broth, berry and fruit juices diluted with water. Exclude: grape juice, carbonated and cold drinks.

DIET #4B

Indications for use: acute colitis and enterocolitis in the recovery stage; chronic enterocolitis in remission, as well as a combination of these diseases with damage to other organs of the digestive tract; acute and chronic infectious diseases with minor impairment of bowel function.

Intended purpose: providing adequate nutrition, minor intestinal sparing, creating conditions for restoring impaired functions of the digestive organs and maintaining a state of compensation [1,2,4,5,6,21,24].

General characteristics: a diet complete in energy value and chemical composition with a slight restriction of mechanical and moderate restriction of



chemical irritants of the gastric mucosa and the receptor apparatus of the digestive tract, excluding foods and dishes that increase fermentation and putrefaction processes in the intestine, strong stimulants of bile secretion, secretory function of the stomach and pancreas, irritating the liver. Cooking: food is boiled, baked, stewed, used mainly whole, fried foods are limited. Diet: 5 meals a day.

Recommended and excluded products and meals

Bread and flour products. Recommended: wheat bread baked the day before, dry biscuits, dry sponge cake, sweet rusks (1-2 times a week in small quantities), unsweetened buns or pies with meat and eggs, apples, jam, cheesecakes with cottage cheese.

Meat and poultry. Recommended: lean, non-stringy beef, veal, rabbit meat, poultry (chicken, turkey) without skin, boiled, stewed, baked, occasionally fried (without breading) chopped or less often in pieces. Diet sausage, doctor's, dairy, hot dogs. Exclude: fatty meats, lamb, goose, duck, sausage, except for permitted types, smoked meats, canned goods.

Sauces and spices. Recommend: vegetable broth and meat broth, sour cream, béchamel, fruit. Dill, parsley, bay leaf, cinnamon, vanillin. Exclude: hot and fatty sauces, pepper, horseradish, mustard.

Drinks. Recommend: tea, coffee, rosehip broth, berry and fruit juices diluted with water. Exclude: grape juice, carbonated and cold drinks.

Fish. Recommend: low-fat varieties, boiled jellied, steamed, sometimes fried (without breading), chopped or in pieces, soaked chopped herring - limited, caviar. Exclude: fatty varieties, salted, dried, smoked.

Eggs. Recommend: soft-boiled up to 1-2 per day, in the form of a steamed omelet, in dishes. Exclude: raw, fried, hard-boiled.

Dairy products. Recommended: milk in dishes, non-acidic sour cream as a seasoning for them, fermented milk drinks (acidophilus, kefir, ryazhenka) if well tolerated, non-acidic cottage cheese, natural calcined, in the form of cottage cheese paste, steamed and baked puddings, mild cheese. Exclude: milk in its natural form, spicy and salted cheese.



Fats. Recommended: butter in its natural form, in dishes up to 15 g per serving, ghee (for frying), refined vegetable oil. Exclude: other varieties.

Cereals, pasta and legumes. Recommended: all cereals and pasta, porridge on water or on water with milk, on meat broth, puddings, pilaf, cutlets (without breading). Exclude: legumes.

Vegetables. Recommend: potatoes in small quantities, beets (if tolerated), cauliflower, carrots, pumpkin, zucchini boiled, steamed, baked in the form of mashed potatoes. Ripe tomatoes in raw form. Exclude: white cabbage, cucumbers, radishes, rutabagas, turnips, horseradish, onions, sorrel, spinach, mushrooms.

Soups. Recommend: on meat or fish broth, vegetable broth with finely chopped vegetables (cereals, vermicelli). Exclude: strong and fatty broths, milk, rassolnik.

Fruits, sweet dishes and sweets. Recommend: ripe soft fruits and berries in raw form. Baked apples and pears. Compotes, jellies, mousses, soufflés, preserves, marmalades from ripe berries and fruits; compotes from dried fruits, marmalade, marshmallows, pastilles, toffee, creamy fudge. Exclude: peaches, plums, melon, watermelon, berries with coarse grains, dried fruits, honey, ice cream, cream.

Sauces and spices. Recommend: on vegetable broth, meat broth, milk (béchamel), fruit; bay leaf, parsley, dill, cinnamon, vanillin. Exclude: hot and fatty sauces, pepper, horseradish, mustard.

Drinks. Recommend: tea, coffee, cocoa on water with milk, rosehip broth, fruit juices, berry, tomato. Exclude: grape juice, kvass, carbonated drinks.

DIET #5

Indications for use: acute hepatitis in the recovery phase, chronic hepatitis, liver cirrhosis, inflammatory diseases of the biliary tract (cholecystitis, cholangitis-hepatitis, etc.) outside of exacerbation, diseases accompanied by dysfunction of the liver and biliary tract in the absence of concomitant diseases of the stomach and intestines.

Intended use: elimination of dysfunction of the liver and biliary tract, regulation of cholesterol and fat metabolism, accumulation of glycogen in the liver, stimulation of bile secretion and intestinal motility.

General characteristics: a diet with a complete energy value with an optimal



content of proteins, fats and carbohydrates, excluding foods rich in purines, nitrogenous extractive substances and cholesterol, oxalic acid, essential oils, fat oxidation products formed during frying. The diet is enriched with lipotropic substances (choline, methionine, lecithin), contains a significant amount of fiber and liquid. Cooking: no frying of dishes; no grinding of food is required. Diet: food is taken 5 times a day in a warm form.

Recommended and excluded products and meals.

Bread and flour products. Recommended: wheat and rye bread baked the day before or dried, products made from plain dough. Exclude: fresh and fried bread, products made from sweet dough, cakes with cream.

Meat and poultry. Recommended: lean varieties (beef, rabbit, chicken, turkey); boiled, baked, lean ham, bologna and diet sausages. Exclude: fatty varieties (goose, duck, game), brains, liver, kidneys, canned food, smoked meats, fried dishes.

Fish. Recommended: lean types, in pieces, boiled, baked with preliminary boiling, jellied (in vegetable broth), stuffed. Exclude: fatty types, smoked, salted, canned, granular caviar (sturgeon, chum salmon, stellate sturgeon).

Eggs. Recommended: baked protein omelet, no more than 1 yolk per day in dishes. Exclude: hard-boiled eggs, fried.

Dairy products. Recommended: milk, kefir, yogurt, sour cream as a seasoning for dishes, non-acidic cottage cheese and dishes made from it (pudding, casserole), mild cheese. Exclude: cream, cottage cheese with high acidity.

Fats. Recommended: natural butter and vegetable oil (sunflower, olive, corn). Exclude: ghee, fried fats, pork, beef, lamb, lard, margarine, cooking fats.

Cereals, pasta and legumes. Recommended: a full range of cereals (especially oatmeal and buckwheat) in the form of porridge, baked puddings with added cottage cheese, carrots, dried fruits, pilaf with vegetables or fruits, vermicelli and boiled noodles. Exclude: legumes.

Vegetables. Recommended: raw, boiled, stewed and baked, onions after boiling, non-acidic sauerkraut. Exclude: radishes, horseradish, sorrel, spinach, turnips, garlic, mushrooms, pickled vegetables.



Soups. Recommended: dairy, vegetable broth with cereals, vermicelli, noodles, fruit, borscht and vegetarian cabbage soup. Flour and vegetables for dressing are not sautéed. Exclude: meat and fish broth, mushroom broth, green cabbage soup.

Fruits, sweet dishes and sweets. Recommend: non-acidic fruits and berries, compotes, jellies, mousses made from them, snowballs, meringues, sugar, honey, jam, non-chocolate candies, marmalade, pastila. Exclude: sour fruits, chocolate, ice cream, cream products.

Sauces and spices. Recommend: milk, sour cream, vegetable, fruit and berry gravies, do not fry flour for sauce, parsley, dill, cinnamon, vanillin. Exclude: spicy meat and fish, mushroom broth, pepper, mustard, horseradish.

Drinks. Recommend: tea with lemon, coffee with milk, vegetable, fruit and berry juices, rosehip infusion. Exclude: coffee, cocoa, cold drinks.

DIET #5A

Indications for use: acute hepatitis and cholecystitis in the initial stage; exacerbation of chronic hepatitis, inflammatory diseases of the biliary tract (cholecystitis, angiocholitis, etc.); condition after operations on the biliary tract; diseases of the liver and biliary tract (hepatitis, cirrhosis, cholecystitis, etc.) in combination with severe inflammatory processes in the stomach and intestines, gastric ulcer or duodenal ulcer.

Intended use: to help eliminate dysfunctions of the liver and biliary tract, accumulate glycogen in the liver, stimulate bile secretion with simultaneous mechanical and chemical sparing of the stomach and intestines. [1,2,4,5,6,21,24]

General characteristics: a diet with a complete energy value with a sufficient content of proteins and carbohydrates, limited amount of fats, primarily refractory, table salt.

Products rich in purines, nitrogenous extractive substances, cholesterol, oxalic acid, coarse fiber, fatty dishes are excluded from the diet.

The diet has an increased content of lipotropic substances (choline, methionine, lecithin), vitamins and liquids. Cooking: boiling is allowed, food is consumed in liquid and mashed form. Diet: food is taken 5 times a day in a warm form.



Recommended and excluded products and meals

Bread and flour products. Recommended: wheat and rye bread baked the day before or dried, unsweetened cookies. Exclude: fresh and rye bread, products made from sweet and puff pastry.

Meat and poultry. Recommended: lean, non-stringy beef, rabbit meat, turkey, chicken (skin removed) in the form of cutlet products, boiled and steamed (mashed potatoes, soufflé, quenelles, etc.). Boiled chicken, skinless, is allowed occasionally in small quantities. Exclude: fatty varieties, goose, duck, game, liver, brains, kidneys, fried and stewed meat in pieces, smoked meats, sausages, canned goods.

Fish. Recommend: low-fat types, boiled and steamed, products made from cutlet mass, mashed potatoes, soufflé from boiled product, jellied on vegetable broth. Exclude: fatty types, smoked, salted, stewed, fried, canned, caviar.

Eggs. Recommend: protein steamed omelet, 0.5-1 yolk per day in dishes. Exclude: in the form of other dishes.

Dairy products. Recommend: milk (if tolerated), fermented milk drinks, sour cream in limited quantities mainly in dishes, low-acid fat-free cottage cheese and dishes made from it, mashed, steamed, mild cheese, grated. Exclude: milk in its natural form with concomitant enterocolitis, low-fat and high-acidity cottage cheese, cream, spicy cheese.

Fats. Recommend: butter and vegetable oil, refined in small quantities in natural form and in dishes. Exclude: other fats.

Cereals, pasta and legumes. Recommend: porridges with milk mixed with water (semolina, well-boiled rice, mashed rolled oats and buckwheat, made from rice and buckwheat flour). Semolina, rice, buckwheat soufflé, boiled vermicelli. Exclude: millet, barley and pearl barley, crumbly porridges, pasta, legumes.

Vegetables. Recommend: boiled, steamed and raw in mashed form (mashed potatoes, soufflé, etc.); pumpkin and zucchini, boiled or stewed in pieces. Exclude: radishes, turnips, horseradish, cabbage, sorrel, spinach, garlic, onions, pickled, salted and marinated vegetables, mushrooms.

Soups. Recommended: milk mixed with water, vegetarian with mashed



vegetables and cereals, cream soups and cream soups; seasoned with butter or sour cream. Exclude: meat, fish, mushroom broths from unchewed vegetables and cereals.

Fruits, sweet dishes and sweets. Recommended: ripe sweet fruits and berries raw unchewed, baked, boiled, jellies, mousses, marshmallows, pastilles, honey, sugar, jam. Exclude: sour hard fruits, berries with hard grains (cranberries, etc.), chocolate, halva, cream products, ice cream.

Sauces and spices. Recommend: vegetable broth or cereal mucus, dairy, fruit and berry, do not fry flour. Exclude: all spices.

Drinks. Recommend: tea with lemon, milk, coffee substitute with milk, rosehip broth, tomato juice, sweet fruit and berry juices. Bread and flour products. Recommended: wheat and rye bread baked the day before or dried, unsweetened cookies. Exclude: fresh and rye bread, products made from sweet and puff pastry.

Meat and poultry. Recommended: lean, non-stringy beef, rabbit meat, turkey, chicken (skin removed) in the form of cutlet products, boiled and steamed (mashed potatoes, soufflé, quenelles, etc.). Boiled chicken, skinless, is allowed occasionally in small quantities. Exclude: fatty varieties, goose, duck, game, liver, brains, kidneys, fried and stewed meat in pieces, smoked meats, sausages, canned goods.

Fish. Recommend: low-fat types, boiled and steamed, products made from cutlet mass, mashed potatoes, soufflé from boiled product, jellied on vegetable broth. Exclude: fatty types, smoked, salted, stewed, fried, canned, caviar.

Eggs. Recommend: protein steamed omelet, 0.5-1 yolk per day in dishes.

Exclude: in the form of other dishes.

Dairy products. Recommend: milk (if tolerated), fermented milk drinks, sour cream in limited quantities mainly in dishes, low-acid fat-free cottage cheese and dishes made from it, mashed, steamed, mild cheese, grated. Exclude: milk in its natural form with concomitant enterocolitis, low-fat and high-acidity cottage cheese, cream, spicy cheese.

Fats. Recommend: butter and vegetable oil, refined in small quantities in natural form and in dishes. Exclude: other fats.

Cereals, pasta and legumes. Recommend: porridges with milk mixed with water



(semolina, well-boiled rice, mashed rolled oats and buckwheat, made from rice and buckwheat flour). Semolina, rice, buckwheat soufflé, boiled vermicelli. Exclude: millet, barley and pearl barley, crumbly porridges, pasta, legumes.

Vegetables. Recommend: boiled, steamed and raw in mashed form (mashed potatoes, soufflé, etc.); pumpkin and zucchini, boiled or stewed in pieces. Exclude: radishes, turnips, horseradish, cabbage, sorrel, spinach, garlic, onions, pickled, salted and marinated vegetables, mushrooms.

Soups. Recommended: milk mixed with water, vegetarian with mashed vegetables and cereals, cream soups and cream soups; seasoned with butter or sour cream. Exclude: meat, fish, mushroom broths from unchewed vegetables and cereals.

Fruits, sweet dishes and sweets. Recommended: ripe sweet fruits and berries raw unchewed, baked, boiled, kissels, jellies, mousses, marshmallows, pastilles, honey, sugar, jam. Exclude: sour hard fruits, berries with hard grains (cranberries, etc.), chocolate, halva, cream products, ice cream.

Sauces and spices. Recommend: vegetable broth or cereal mucus, dairy, fruit and berry, do not fry flour. Exclude: all spices.

Drinks. Recommend: tea with lemon, milk, coffee substitute with milk, rosehip broth, tomato juice, sweet fruit and berry juices. Exclude: natural coffee, cocoa, cold and carbonated.

DIET #5P

Purpose: to promote inhibition of the exocrine function of the pancreas, synthesis of protein necessary for the construction of pancreatic enzymes and their inhibitors, chemical and mechanical sparing of the digestive tract, prevention of fatty infiltration and dystrophy of the pancreas and liver [1,2,4,5,6].

Indications for use: acute pancreatitis and exacerbation of chronic pancreatitis.

Option 1.

General characteristics: a diet with reduced energy value, normal protein content, significantly limited fats and carbohydrates, mechanically and chemically gentle due to the exclusion of products rich in extractive substances, stimulating the secretion of digestive glands and containing coarse fiber. Culinary processing: food in boiled or



steamed form of liquid and semi-liquid consistency. Diet regimen: fractional meals 5-6 times a day.

Recommended and excluded products and meals.

Bread and baked goods Recommended: wheat bread rusks (50 g per day). Exclude: other flour products.

Meat and poultry. Recommended: lean, non-stringy beef, rabbit meat, chicken, turkey in boiled or steamed form, mashed. Exclude: fatty varieties, lamb, pork, goose, duck, liver, brains, kidneys in fried and stewed form, smoked meats, sausages, canned food.

Fish. Recommended: low-fat in the form of soufflé, quenelles. Exclude: fatty, fried, stewed, smoked, salted, canned food, caviar.

Eggs. Recommended: omelet protein powder 1-2 eggs per day, yolk - up to 0.5 per day in dishes. Exclude: in the form of other dishes.

Dairy products. Recommended: milk in dishes, non-acidic cottage cheese freshly prepared in the form of paste, steamed puddings. Exclude: milk in its natural form, cream, fermented milk drinks, sour cream, fatty and high-acid cottage cheese, fatty and salty cheese.

Fats. Recommend: unsalted butter and refined vegetable oil in ready meals. Exclude: other fats, frying with them.

Cereals, pasta and legumes. Recommend: mashed, semi-viscous porridges (buckwheat, rolled oats, etc.), soufflé, puddings. Exclude: millet, barley, crumbly porridges, pasta, legumes.

Vegetables. Recommend: potatoes, carrots, zucchini, cauliflower in the form of puree and steamed puddings. Exclude: white cabbage, radish, turnip, rutabaga, spinach, sorrel, garlic, onion.

Soups. Recommend: slimy from cereals (oatmeal, pearl barley, rice, semolina), cream soup from boiled meat. Exclude: meat and fish broth, mushroom and vegetable broth, dairy, cabbage soup, borscht, okroshka, beetroot soup.

Fruits, sweet dishes and sweets. Recommend: strained compotes, mousse, jelly (with xylitol or sorbitol). Exclude: all others.



Sauces and spices. Recommend: semi-sweet fruit and berry sauces. Exclude: other sauces and spices. Drinks. Recommend: weak tea, rosehip broth. Exclude: other drinks, including vegetable and fruit juices.

Option 2

Indications for use: chronic pancreatitis in the phase of abating exacerbation (from 5-7 days after using option 1 of table No. 5p) and remission (for 2-4 months).

General characteristics: a diet of moderate energy value with a high content of protein, lipotropic substances and vitamins, limited amount of carbohydrates (primarily easily digestible) and fats (mainly refractory), cholesterol, essential oils, coarse fiber, table salt, extractive substances, purines, fried foods and products that promote fermentation processes in the intestines and flatulence are excluded. Culinary processing: food in boiled, steamed and chopped form. Diet regimen: fractional meals 5-6 times a day. Recommended and excluded dishes are similar to those in diet No. 5, except that the amount of easily digestible carbohydrates ...is limited, and sugar is partially replaced with xylitol (30–40 g).

DIET #6

Indications for use: gout, urolithiasis with the formation of stones from salts of uric (uraturia) or oxalic (oxaluria) acid; other diseases in which it is indicated to limit meat and fish.

Intended purpose: to help reduce the endogenous formation of uric acid, remove it from the body and normalize purine metabolism; limit the intake of oxalic acid with food.

General characteristics: a diet with a complete energy value with a normal content of carbohydrates, limited amount of proteins, fats and table salt. Exclude foods rich in purines, oxalic acid. Increase the content of alkalizing products (dairy, vegetables, fruits) and liquids.

Culinary processing: meat and fish are recommended boiled, after which frying is allowed, otherwise - normal. Diet: eat 4-5 times a day, drink in between. Recommended and excluded products and dishes Bread and flour products. Recommended: various types of wheat and rye flour. Exclude: products made from



rich and puff pastry. Meat and poultry. Recommended: low-fat varieties, boiled or baked after preliminary boiling, in limited quantities (2-3 times a week). Exclude: fatty varieties, meat of young animals and birds, liver, kidneys, brains, tongue, fried and stewed, sausages, canned food, smoked meats.

Fish. Recommended: low-fat, boiled, in limited quantities (2-3 times a week). Exclude: fatty varieties, salted, smoked, canned, caviar.

Eggs. Recommended: one per day, unlimited cooking.

Dairy products. Recommended: milk, fermented milk products, sour cream, cottage cheese, cheese in natural form and for cooking. Exclude: salty and spicy cheeses, cottage cheese with high acidity.

Fats. Recommended: butter, ghee, vegetable oil. Exclude: lamb, beef, culinary.

Cereals, pasta and legumes. Recommended: cereals and pasta of various preparations, the entire range in limited quantities. Exclude: legumes. Vegetables. Recommended: raw and in the form of various dishes. Exclude: sorrel, spinach, rhubarb, salted and marinated mushrooms.

Soups. Recommended: dairy, vegetarian (borscht, cabbage soup, vegetable with added cereals), cold (beetroot soup, okroshka).

Fruits, sweet dishes and sweets. Recommend: non-acidic fruits and berries, fresh and in any cooking, jelly, milk creams, sugar, honey, jam, marmalade, pastille, meringues. Exclude: raspberries, figs, chocolate.

Sauces and spices. Recommend: milk, sour cream, tomato, vegetable broth, vanillin, cinnamon, citric acid.

Drinks. Recommend: weak tea and coffee with milk, rosehip broth, fruit and berry juices. Exclude: strong tea and coffee, cocoa.

DIET #7A

Indications for use: acute glomerulonephritis in severe (after fasting days) and moderate (from the onset of the disease) cases; chronic glomerulonephritis with severe renal failure.

Intended use: maximum sparing of kidney function, unloading of protein metabolism, increasing diuresis and eliminating edema, improving the removal of



nitrogenous waste and under-oxidized metabolic products from the body, creating favorable conditions for blood circulation, lowering blood pressure.

General characteristics: reducing the energy value of the diet due to significantly limiting the amount of proteins and moderately - fats and carbohydrates; the diet is enriched with vitamins; the amount of free fluid is limited. Exclude table salt and foods that irritate the kidneys, excite the cardiovascular and central nervous systems, rich in extractive substances, essential oils, oxalic acid.

Culinary processing: all dishes are prepared without salt; boiling, baking, light frying is used.

Diet: eat 5-6 times a day while staying in bed; the diet is prescribed for 5-7 days.

Recommended and excluded foods and dishes Bread and flour products. It is recommended: unsalted bread, pancakes and yeast pancakes without salt. It is excluded: regular bread, confectionery, flour products with added sodium bicarbonate.

Meat and poultry - excluded. Fish - excluded.

Eggs. It is recommended: yolks in limited quantities in dishes. Dairy products. It is recommended: whole milk, cream, yogurt, sour cream. It is excluded: cottage cheese, cheese. Fats. It is recommended: butter, ghee, vegetable oil. It is excluded: pork, lamb, beef, margarine.

Cereals, pasta and legumes. Recommend: cereals and pasta without limiting the range and method of cooking. Exclude: legumes.

Vegetables. Recommend: fresh in the form of various dishes; onions, boiled and fried in dishes. Parsley, dill. Exclude: pickled, salted, marinated, spinach, sorrel, radish, horseradish, mushrooms.

Soups. Recommend: cereal, vegetable, fruit, seasoned with sour cream, sautéed onions, herbs. Exclude: dairy, legume, meat, fish and mushroom broths.

Fruits, sweet dishes and sweets. Recommend: any fruits and berries; raw, baked, dried, compotes, kisseles, jelly, sugar, honey, jam, non-chocolate candies. Exclude: milk cream, chocolate, ice cream. Sauces and spices. Recommended: milk tomato sauce, vegetable and fruit gravies, citric acid, vanillin, cinnamon. Exclude: meat, fish and mushroom broths, pepper, horseradish, mustard.



Drinks. Recommended: weak tea, rosehip decoction, fruit, berry and tomato juices. Exclude: coffee, cocoa, mineral waters.

For patients with severe renal failure, a version of this diet is recommended, in which animal protein predominates (75%). In this version of table #7a, unlike the one given, instead of regular bread, protein-free bread made from corn starch and wheat bran is used, meat and poultry are recommended (lean beef, veal, rabbit meat, chicken, turkey in pieces or chopped, fried after preliminary boiling), fish (lean types, in pieces or chopped, boiled or fried after preliminary boiling), eggs (one per day for cooking and in the form of a protein omelet), cottage cheese. Instead of regular cereals, it is advisable to use sago, pasta made from cereal starch and swelling amylopectin starch.

DIET #7B

Indications for use: acute glomerulonephritis and exacerbation of chronic glomerulonephritis (after using diet #7a). Intended purpose: sparing kidney function, anti-inflammatory effect, increasing diuresis, improving the removal of nitrogenous waste and under-oxidized metabolic products from the body, reducing blood pressure, providing favorable conditions for blood circulation.

General characteristics: moderate restriction of the amount of proteins, significant reduction in the amount of fluid. Table salt is not added to food, according to indications, it is given to the patient as prescribed by a doctor up to 2 g per day for adding salt to individual dishes to taste.

Culinary processing: similar to that in diet #7a Diet: food is taken 5-6 times a day. The list of recommended and excluded products and dishes differs from that in diet No. 7a by the daily inclusion of boiled meat or fish (50 g) and 200 ml of milk or kefir, 1 egg or 100 g of cottage cheese.

DIET #7

Indications for use: chronic glomerulonephritis (during the period of attenuation of the process), acute glomerulonephritis (in the recovery stage), nephropathy of pregnant women, other diseases for which a low-salt diet is indicated. Intended use: moderate sparing of kidney function, lowering blood pressure, reducing edema, improving the removal of nitrogenous waste and under-oxidized products from the



body.

General characteristics: slightly limit protein, the amount of table salt, free liquid, substances that irritate the kidneys, stimulate the cardiovascular and central nervous systems, meat, dairy and mushroom broths, products rich in essential oils and oxalic acid.

Culinary processing: food is used boiled and chopped; frying of meat and fish is allowed after preliminary boiling. Diet: food is taken 5 times a day. Recommended: the same products and dishes as in diet No. 7b, with an increase in the amount of protein-rich foods (meat, fish, cottage cheese, egg whites, etc.) Excluded: the same products as in diet No. 7a.

DIET #8

Indications for use: obesity (in the absence of dysfunction of the digestive organs). Purpose: prevention and elimination of excess accumulation of adipose tissue in the body.

General characteristics: reduction of energy value mainly due to carbohydrates (especially easily digestible) and to a lesser extent - fats; limitation of the amount of table salt, free liquid; moderate content of proteins (especially animal) and fiber; exclusion of extractive substances.

Culinary processing: food boiled, stewed or baked; instead of sugar, its substitutes are used (xylitol, sorbitol, etc.); fried, chopped and mashed products are limited; food is prepared without spices and table salt. Diet regimen: fractional meals up to 6 times a day. Recommended and excluded products and dishes Bread and flour products. Recommended: whole meal wheat, rye in limited quantities, protein-wheat and protein-bran. Exclude: premium wheat flour products, rich and puff pastry, cookies.

Meat and poultry. Recommended: lean (beef, veal, rabbit), boiled, stewed and fried chicken after preliminary boiling; jellied meat, beef sausages. Exclude: fatty varieties, goose, duck, brains, ham, sausages, boiled and smoked sausages, canned food.

Fish. Recommended: lean varieties boiled, baked, stuffed and jellied; seafood. Exclude: fatty varieties, smoked, salted, canned fish in oil, caviar.



Eggs. Recommend: boiled and in the form of an omelet.

Dairy products. Recommend: milk (mainly protein), low-fat and Tallinn kefir, yogurt, sour cream - in limited quantities (mainly in dishes), cottage cheese, low-fat and unsalted cheese. Exclude: baked milk, cream, fermented baked milk, sweet yogurt, low-fat cottage cheese, salted and fatty cheese.

Fats. Recommend: butter and vegetable oil in limited quantities. Exclude: pork fat, beef, lamb and cooking fats.

Cereals, pasta and legumes. Recommend: crumbly porridge. Exclude: other cereals, pasta, legumes. Vegetables. Recommend: raw and cooked in any form (potatoes in limited quantities); sauerkraut in washed form. Exclude: pickled and salted.

Soups. Recommend: vegetable with meatballs borscht, shchi, okroshka, beetroot soup. Exclude: potato, with pasta, cereals, legumes, dairy.

Fruits, sweet dishes and sweets. Recommend: sweet and sour fruits and berries, jelly, gelatin mousse, compotes, sambuca with xylitol or sorbitol. Exclude: watermelon, grapes, raisins, figs, dates, candy, honey, jam, sugar, ice cream, jelly.

Sauces and spices. Recommend: tomato, white, weak mushroom, vinegar. Exclude: spicy and fatty, mayonnaise, all spices.

Drinks. Recommend: tea, weak coffee, coffee with milk without sugar. Berry, fruit, vegetable juices. Exclude: sweet juices, cocoa, sweet kvass, lemonade with sugar.

DIET #9

Indications for use: for diabetes mellitus as a trial diet, for therapeutic purposes - for patients with normal or slightly overweight body weight, for whom insulin is not indicated or it is administered in small doses (up to 20-30 IU) for mild to moderate diabetes mellitus. The diet can be used for allergic conditions and diseases (rheumatism, infectious non-specific polyarthritis, bronchial asthma, Quincke's edema, urticaria, etc.). [1,2,4,5,6,7,13,18,19,20]

Purpose: to determine the tolerance of a patient with diabetes mellitus to a dosed food load to select a dose of insulin and other sugar-lowering drugs, to provide conditions for normalizing carbohydrate metabolism, partially fat, water-salt and



protein metabolism, desensitization of the body.

General characteristics: moderate restriction of energy value mainly due to carbohydrates (especially easily digestible) and, to a lesser extent, fats with a normal amount of proteins, limitation of cholesterol and extractive substances; increase in the level of lipotropic substances and vitamins.

Culinary processing: normal, when making sweet dishes and drinks sugar substitutes are used. Diet: food is consumed up to 5-6 times a day with a precise distribution of carbohydrates (when using the diet as a trial, carbohydrates are evenly distributed between meals, when using insulin - taking into account its dose and time of administration). Recommended and excluded products and dishes Bread and flour products. Recommended: rye bread, protein-wheat, protein-bran, wheat grade 2 within the carbohydrate norm. Excluded: rich and sweet flour products.

Meat and poultry. Recommend: lean beef, veal, lamb, trimmed and whole pork, rabbit meat, chopped and whole chicken, boiled, stewed and fried after boiling, beef jelly, jellied chicken; lean ham, doctor's, diabetic, beef sausages, frankfurters. Exclude: fatty varieties, goose, duck, fatty ham, smoked meats, canned goods.

Fish. Recommend: lean boiled, baked and occasionally fried, jellied. Soaked herring in limited quantities; canned goods in tomato sauce, in their own sauce or in their own juice. Exclude: fatty varieties, salted, caviar.

Eggs. Recommend: up to 2 pcs. boiled or fried.

Dairy products. Recommended: milk, yogurt, kefir, low-fat or semi-fat cottage cheese, unsalted and low-fat cheese, sour cream in limited quantities. Exclude: sweet curd cheeses, cream.

Fats. Recommended: butter and vegetable oil. Exclude: meat and cooking fats. Cereals, pasta and legumes. Recommended: barley, buckwheat, pearl barley, millet, oatmeal porridge, peas in limited quantities, taking into account the carbohydrate norm. Exclude: semolina, rice, pasta.

Vegetables. Recommended: cabbage, lettuce, pumpkin, zucchini, cucumbers, tomatoes, eggplants, taking into account the carbohydrate norm potatoes, carrots, beets, green peas. Exclude: pickled and salted.



Soups. Recommend: on strong low-fat meat, fish, mushroom broths, with potatoes, vegetables, meatballs, permitted cereals; borscht, cabbage soup, beetroot soup, okroshka (meat and vegetable). Exclude: fatty broths, milk with cereals and noodles, legumes.

Fruits, sweet dishes and sweets. Recommend: sweet and sour fruits and berries in any form. Compotes, mousses, jellies, candies, nut cookies with sorbitol, xylitol, saccharin. Exclude: grapes, raisins, dates, figs, bananas, sugar, jam, candies, ice cream.

Sauces and spices. Recommend: sauces on vegetable broth, on weak and low-fat meat, fish and mushroom broths; horseradish, pepper, mustard (limited). Exclude: spicy, salty and fatty sauces.

Drinks. Recommended: tea, coffee, cocoa with milk without sugar, rosehip infusion, juices of fresh unsweetened fruits and berries, tomato juice. Exclude: sweet fruit and berry juices (grape and others), sweet kvass, lemonades with sugar.

DIET #9A

Indications for use: mild diabetes mellitus (less often - moderate) without the use of insulin, with excess body weight (II and III degree of obesity).

Intended purpose: elimination of carbohydrate, fat, water-salt and protein metabolism disorders.

General characteristics: similar to diet #9 with the difference that the energy value is more significantly limited due to carbohydrates and fats.

Culinary processing, diet, list of products permitted for consumption and subject to restrictions are similar to those in diet #9.

DIET #9B

Indications for use: diabetes mellitus (moderate and severe) under insulin therapy and an extended physical activity regime.

Purpose: the same as diet #9a.

General characteristics: a complete diet in terms of energy value, protein, fat, carbohydrate, mineral and vitamin content.

Culinary processing and diet are similar to those in diet #15. In terms of the set of food products, diet #9b also resembles diet #15 with the difference that it limits the



amount of easily digestible carbohydrates (sugar, honey, jam, etc.). Sugar consumption is allowed up to 30 g per day [1,2,4,5,6,7,13,18,19,20].

DIET #10

Indications for use: compensated heart disease or mild circulatory failure (stages I-II), stage I-II hypertension, chronic glomerulonephritis and pyelonephritis without impairment of the nitrogen-excreting function of the kidneys.

Intended use: facilitating the functioning of the cardiovascular system while sparing the digestive organs and kidneys moderately; increasing diuresis and relieving interstitial metabolism.

General characteristics: significant restriction of table salt and liquids, plant fiber and cholesterol-rich foods that promote flatulence; substances that stimulate the cardiovascular and nervous systems, irritating the liver and kidneys (extractive, etc.); enrichment of the diet with potassium, calcium salts, lipotropic substances (lecithin, methionine); ensuring sufficient intake of vitamins. Culinary processing: with moderate mechanical sparing; all dishes without salt.

Diet: eat 5 times a day.

Recommended and excluded foods and dishes Bread and flour products. Recommended: rye and wheat bread baked yesterday, unleavened cookies, biscuits. Exclude: fresh bread, rich and puff pastry, pancakes.

Meat and poultry. Recommended: lean varieties (beef, veal, pork, chicken, turkey, rabbit) boiled and then baked or fried, in pieces or chopped. Exclude: fatty varieties, duck, goose, sausages, smoked meats, canned food.

Fish. Recommended: lean boiled and then fried, chopped or in pieces. Exclude: fatty varieties (sturgeon, beluga, chum salmon, etc.), smoked, salted, caviar, canned food. Eggs – excluded. Dairy products. Recommended: whole milk (if it does not cause flatulence), cream, fermented milk drinks, sour cream, cottage cheese, low-salt cheese. Exclude: salted cheeses.

Fats. Recommended: unsalted butter and vegetable oil. Exclude: meat and cooking fats.

Cereals, pasta and legumes. Recommended: any cereals and pasta cooked in water



or milk (porridge, puddings, cutlets, etc.). Exclude: legumes (peas, beans).

Vegetables. Recommended: potatoes, beets, carrots, white cabbage and cauliflower, boiled and baked; cucumbers, tomatoes, carrots, lettuce, green onions, dill, parsley, raw. Exclude: pickled, salted, marinated, radish, radish, spinach, sorrel, mushrooms.

Soups Recommended: vegetarian with potatoes, vegetables, cereals, milk, fruit. Exclude: meat, fish and mushroom broths; with legumes.

Fruits, sweet dishes and sweets. Recommended: soft berries and fruits in raw form, compotes, kissels, jellies, mousses, milk creams, jam, honey, non-chocolate candies, marshmallows, pastilles. Exclude: fruits with coarse fiber, berries with coarse grains, chocolate, cakes. Sauces and spices. Recommended: on vegetable broth, sour cream, milk, tomato; fruit sauces; vanillin, cinnamon, cloves. Exclude: meat, fish and mushroom broths, pepper, horseradish, mustard.

Drinks. Recommend: weak tea, coffee substitute, vegetable and fruit juices (grape - in limited quantities), rosehip broth. Exclude: strong tea, natural coffee, cocoa, carbonated drinks.

Fruits, sweet dishes and sweets. Recommend: raw berries and fruits, dried fruits, compotes, kissels, mousses, jelly. Grapes, raisins, sugar, honey, jam - limited. Partially xylitol instead of sugar. Exclude: cream products, ice cream, chocolate.

Sauces and spices. Recommend: vegetable broth, milk; berry and fruit sauces, cinnamon, citric acid, vanillin. Limited mayonnaise and horseradish. Exclude: meat, fish and mushroom sauces, mustard, pepper.

Drinks. Recommend: weak tea, coffee substitute with milk, vegetable, berry and fruit juices, rosehip decoction. Exclude: strong tea, natural coffee, cocoa.

DIET #10I

Indications for use: myocardial infarction.

Purpose: to promote acceleration of reparative processes in the myocardium and restoration of the functional capacity of the heart; reduce the load on the cardiovascular system, prevent progression of atherosclerosis, thromboembolic complications, excessive weight gain, normalize intestinal motility.



General characteristics: reduction of the energy value of food with its subsequent gradual increase, limitation of table salt, liquid, animal fats, cholesterol, nitrogenous extractive substances, enrichment with ascorbic acid, lipotropic substances, potassium salts, exclusion of products that promote flatulence [1,2,4,5,6].

Culinary processing: exclude fried food, all dishes are prepared without salt: in the 1st diet they are prepared in a mashed form, in the 2nd and 3rd diets they are prepared in an unmashed form.

Diet regimen. Diet I is prescribed in the acute period of myocardial infarction (in the first 7-8 days), with meals 6 times a day; Diet II - in the subacute period (2nd, 3rd week), with meals 5 times a day; Diet III - during the scarring period (from the 4th week), with meals 5 times a day. Recommended and excluded products and dishes

I diet

Bread and flour products. Recommended: wheat bread in the form of crackers. Exclude: rye bread, pancakes, cakes, pastries.

Meat and poultry. Recommended: lean beef, veal, chicken, boiled and mashed. Exclude: fatty varieties, goose, duck, brains, liver, kidneys, fried, in pieces, fried, smoked, salted, caviar, canned food. Fish.

Recommended: lean fish and seafood - boiled or steamed. Exclude: fatty types of fish, canned fish, salted fish, caviar.

Eggs. Recommended: protein steam omelet.

Exclude: fried, hard-boiled. Dairy products. Recommend: diluted milk (in limited quantities), fermented milk drinks, low-fat strained cottage cheese, sour cream (in limited quantities) in dishes. Exclude: heavy cream, cottage cheese, cheese. Fats. Recommend: butter and vegetable (mostly unrefined) oil. Exclude: meat and cooking fats.

Cereals, pasta and legumes. Recommended: mashed porridges from buckwheat, oatmeal, semolina, rice. Exclude: pasta, legumes.

Vegetables. Recommended: fresh grated carrots, mashed, cauliflower, boiled beets, mashed. Exclude: other vegetables, pickled, salted, marinated.

Soups. Recommended: vegetable, mashed in vegetable broth with egg flakes.



Exclude: meat, fish and mushroom broths, from cereals, legumes, pickle soup, borscht, cabbage soup.

Fruits, sweet dishes and sweets. Recommended: fresh fruits in the form of puree, baked, mashed compotes, sugar. Exclude: berries and fruits with coarse fiber, grapes, chocolate, products with cream.

Sauces and spices. Recommended: milk, vegetable broth, sweet, berry and fruit sauces. Exclude: meat, fish and mushroom broths, spices.

Drinks. Recommended: weak tea, coffee substitute, vegetable and fruit juices, rosehip broth. Exclude: strong tea, natural coffee, cocoa, grape juice, carbonated drinks.

II diet

Bread and flour products. Recommended: wheat bread, rye bread, protein-bran bread baked yesterday. Exclude: products made from rich and puff pastry, pies, pancakes, fritters, cakes, pastries.

Meat and poultry. Recommended: lean beef, veal, chicken, boiled, chopped, in pieces. Exclude: fatty varieties, goose, duck, brains, liver, kidneys, fried, smoked, canned.

Fish - excluded.

Eggs. Recommended: protein steam omelet. Exclude: fried, hard-boiled.

Dairy products. Recommended: milk, diluted and in dishes, fermented milk drinks, low-fat cottage cheese, sour cream in dishes, mild grated cheese. Exclude: heavy cream and cottage cheese, salted and spicy cheese.

Fats. Recommended: butter and vegetable oil. Exclude: meat and cooking fats.

Cereals, pasta and legumes. Recommended: porridge from buckwheat, oatmeal, semolina, rice, boiled noodles. Exclude: pasta, legumes.

Vegetables. Recommended: beets, carrots, boiled cauliflower, fresh, grated carrots. Fresh cucumbers, tomatoes in salad form, boiled mashed potatoes. Exclude: mushrooms, turnips, rutabagas, spinach, sorrel.

Soups. Recommended: vegetarian, unmashed vegetables and cereals, dairy. Exclude: meat, fish and mushroom broths. Fruits, sweet dishes and sweets.



Recommended: berries and fruits raw, baked, pureed, dried fruits, compote, jelly, sugar. Exclude: grapes, raisins, chocolate, cream products, ice cream.

Sauces and spices. Recommended: dairy, vegetable broth, sweet, fruit and berry gravies. Exclude: meat, fish and mushroom broths, spices.

Drinks. Recommended: weak tea, coffee substitute, vegetable and fruit juices, rosehip broth. Exclude: strong tea, natural coffee, cocoa, grape juice, carbonated drinks.

III diet

The III diet, in terms of the set of recommended and excluded products and dishes, corresponds to diet No. 10c.

DIET #10C

Indications for use: atherosclerosis of the vessels of the heart, brain and other organs; hypertension stage II-III, myocardial infarction in the scarring stage.

Intended purpose: to counteract the progression of atherosclerosis, associated metabolic disorders, hemocoagulation, to promote weight loss in obesity [1,2,4,5,6,7].

General characteristics: reduction of the content of easily digestible carbohydrates and animal fats, the degree of which depends on body weight (two diet options are used); limitation of table salt intake; reduction of cholesterol levels in the body, nitrogenous extractive substances; enrichment of the diet with lipotropic substances, essential fatty acids, vitamins (except calciferol), fiber, potassium, magnesium, seafood.

Culinary processing: food in boiled, baked and chopped form without salt.

Diet: 5-6 meals a day.

Recommended and excluded products and dishes. Bread and flour products.

Recommended: rye bread (from sifted peeled flour), wheat bread (from 1st and 2nd grade flour), "Health", protein-bran. Exclude: products made from rich and puff pastry, pies, pancakes, cakes.

Meat and poultry. Recommended: lean varieties (beef, veal, chicken) boiled or baked, chopped or in a piece, jellied boiled chicken or meat in vegetable broth, lean ham. Exclude: fatty varieties, goose, duck, fried meat without pre-boiling, brains, liver,



kidneys, smoked meats, sausages, canned food.

Fish. Recommended: lean types, baked or boiled, chopped or in a piece, jellied in vegetable broth; seafood dishes. Exclude: fatty types, smoked, salted, caviar, canned.

Eggs. Recommend: soft-boiled (up to 3 pieces per week), protein steam omelet.

Dairy products. Recommended: milk, fermented milk drinks, low-fat cottage cheese, low-fat and unsalted cheese, sour cream in limited quantities (mainly in dishes). Exclude: heavy cream, cottage cheese, salted and fatty cheese.

Fats. Recommended: butter and ghee (in limited quantities), vegetable oil (mainly unrefined). Exclude: meat and cooking fats.

Cereals, pasta and legumes. Recommended: crumbly porridges, casseroles, puddings made from buckwheat (kernel), oatmeal, barley and other cereals. Exclude: semolina, rice, pasta, legumes.

Vegetables. Recommended: various (including seaweed), raw, boiled and baked; mushrooms, turnips, rutabaga, spinach, sorrel - in limited quantities.

Soups. Recommended: with vegetables, vegetarian with potatoes and cereals, dairy, fruit; borscht, cabbage soup. Exclude: broths from meat, fish, mushroom and legumes.

DIET #10A

Indications for use: cardiovascular diseases with severe circulatory failure (stages II–III).

Intended purpose: facilitating the functioning of the cardiovascular system while significantly sparing the digestive organs and kidney function; increasing diuresis, unloading the interstitial metabolism [1,2,4,5,6,7,13,24].

General characteristics: reducing energy value due to proteins (especially vegetable), fats (mainly refractory) and carbohydrates. Significant restriction of table salt and free liquid, vegetable fiber, foods that promote flatulence, rich in cholesterol; substances that stimulate the cardiovascular and nervous systems, irritate the liver and kidneys. Enrichment of the diet with potassium, calcium salts, lipotropic substances (lecithin, methionine), ensuring sufficient intake of vitamins. Culinary processing: all dishes are prepared without salt; frying, boiled and mashed food is not allowed.



Diet: eat 6 times a day. Use the diet for no more than 2 weeks. Recommended and excluded foods and dishes.

Bread and flour products. Recommended: wheat bread and cookies baked without salt. Exclude: bread and cookies of conventional baking.

Meat and poultry. Recommended: lean varieties of beef, veal, turkey, chicken, rabbit, boiled, chopped and mashed and in a piece (tender young meat). Exclude: fatty and sinewy lamb, goose, duck, sausages, smoked meats, canned food.

Fish. Recommended: lean boiled, in a piece or chopped, jellied after boiling. Exclude: fatty types, smoked, salted, caviar, canned food.

Eggs. Recommended: up to 2 per day, soft-boiled, as a steamed omelet and in dishes. Exclude: raw, fried, hard-boiled.

Dairy products. Recommended: whole milk (if it does not cause flatulence), curdled milk, kefir, sour cream in dishes, cream in limited quantities, fresh strained cottage cheese. Exclude: cheese.

Fats. Recommended: unsalted butter and refined vegetable oil. Exclude: meat and cooking fats.

Cereals, pasta and legumes. Recommended: porridge, puddings, soufflé from semolina, strained rolled oats, rice and buckwheat; boiled vermicelli. Exclude: pearl barley, millet, pasta, legumes.

Vegetables. Recommend: potatoes (in limited quantities) baked, boiled, mashed, beets, carrots, cauliflower, boiled in the form of mashed; stewed zucchini and pumpkin, vegetable soufflé, fresh ripe tomatoes. Exclude: other vegetables, pickled, salted, marinated.

Soups. Recommend: from mashed and finely chopped vegetables (potatoes, carrots, beets), cereals (semolina, mashed rolled oats, rice), fruit. Exclude: meat, fish, mushroom broths, cabbage soup, borscht, milk, cold soups, pickle soup.

Fruits, sweet dishes and sweets. Recommend: soft fruits and berries in raw form, baked apples, dried apricots and prunes in soaked form, compote, jelly, mousse, jelly, sugar, honey, jam, marshmallow, marmalade. Exclude: berries and fruits with coarse fiber, grapes, raisins, chocolate, products with cream.



Sauces and spices. Recommend: white sauce, sweet and sour vegetable and fruit gravies. Exclude: on meat, fish and mushroom broths, spices.

Drinks. Recommend: weak tea, coffee substitute, vegetable and fruit juices, rosehip broth. Exclude: strong tea, natural coffee, cocoa, grape juice, carbonated drinks, mineral waters rich in sodium.

Diet #11 is used for tuberculosis, pneumonia, iron-deficiency anemia, after infectious diseases, injuries, and operations.

Diet # 12 is intended for patients with diseases of the central nervous system with increased excitability.

Diet # 13 is used for acute infections.

Diet # 14 - for urolithiasis.

Diet # 15 is aimed at restoring the body after an illness or operation, adapting to the usual diet for a healthy person. [1,2,5].



Conclusions

Medical nutrition is an important element of complex therapy for various diseases in adults and children. In some situations it plays the role of one of the main therapeutic factors, in others it creates a favorable background for the more effective action of other therapeutic measures.

Each therapeutic diet is an important component of complex treatment and therefore has indications for use, a target (therapeutic) purpose, and is also characterized by certain energy value and chemical composition, features of culinary food processing, diet, and a list of permitted and recommended dishes.

Therapeutic fasting allows you to reduce body weight, increase insulin resistance, reduce cardiovascular risks and systemic inflammatory response, neutralize intoxication, thereby providing a tremendous therapeutic effect on the metabolic functions of the body.

Unloading-dietary fasting has a therapeutic effect only if an individual and differentiated approach is followed, taking into account the etiology, pathogenesis of the disease, the nature of metabolic disorders, the phase of the pathological process, the state of the digestive organs, the presence of concomitant diseases, the gender and age of the patient.

And, although the overall effects of dosed therapeutic fasting are beneficial in terms of metabolic functions, some fasting specialists point to cases of decreased bone density and muscle mass after fasting. Thus, to maintain lean body mass and bone density, they recommend close monitoring, a protein-rich diet after the fast, and concomitant isometric resistance training.

Thus, therapeutic nutrition should be based on the physiological needs of a healthy person for nutrients and energy, with adjustments in accordance with the characteristics of pathogenesis, clinical course, stage of the disease and metabolic disorders, the patient's tastes and national traditions.